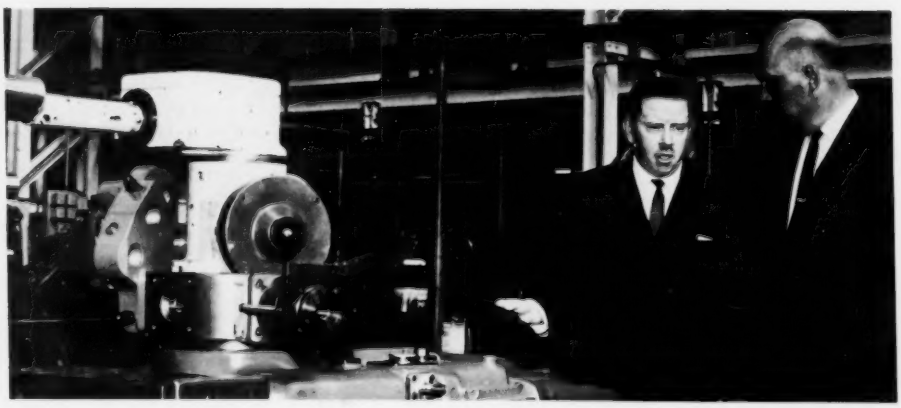
A U.S. DEPARTMENT OF COMMERCE WEEKLY

International Commerce

July 13, 1964

Florida firm is recent newcomer to U.K.

Mission studies British disc programming



Business Bulletins *from around the world*

BELGIUM—Ohio Steel Foundry Co., Cockerill-Ougree of Belgium form Ohio Steel Co. of Belgium at Seraing-Val Saint Lambert. Plant to produce forged steel cylinders for cold-rolled steel industry.

Aleurope, joint venture of Reynolds Aluminum Co., Société Generálé de Belgique, open $10 million plant at Ghlin. Plant, employing 500 people, to produce aluminum extruded sections, thin laminated sheets, packaging materials.

COLOMBIA—New cement plants in Toluviejo (Bolivar), and Moniquira (Boyaca) planned Toluviejo project, promoted by Corporacion Financiera Colombiana de Desarrollo Industrial (Colombian Finance Corporation for Industrial Development), to represent total investment of approx. $11.7 million. Plant will have full capacity of 1,000 tons per day. Moniquira project to cost $8 million, have daily output of 600 tons.

ETHIOPIA—Bottling Co. of Ethiopia announces completion of new bottling plant in Asmara capable of producing 40,000 bottles of Coca Cola daily. Plant cost approx. $240,000.

Coffee quota of 70,500 tons coffee exports, plus additional 1,500 tons prorata share of general increase in quotas given all producing countries, recommended by International Coffee Council, accepted by Ethiopian Government.

FINLAND—A.B. Pellos Oy starts construction of Europe's most modern particle board plant at Riistina. Scheduled for completion in September, new factory to have daily production capacity of 300 square meters of particle board. A.B. Pellos Oy also announces plans for early construction of largest plywood plant with planned annual output 25,000 square meters.

FRANCE—Johns Manville to manufacture industrial adhesives jointly with APIS, at Bellegarde-sur-Valserine, Ain.

Booth Fisheries, Chicago, subsidiary of Consolidated Foods, Peche & Froid of Boulogne established Compagnie Internationale des Produit Surgeles, Paris, for Fishing, processing, sales of fresh-sea and deep-frozen products.

GERMANY—Kaiser Aluminum & Chemical Corp., Oakland, Calif., establishes new subsidiary, Kaiser Aluminum Kabel-Werk at Berlin. Plant, estimated to cost $3.5 million to be first factory to take up aluminum cable production in Germany.

Port Authority of Georgia opens office near Bonn to provide information, service to shippers operating between Europe, U.S. Office to facilitate direct shipments of goods to states, industrial centers in U.S. serviced by ports of Savannah and Brunswick, Georgia.

INDIA—Government announces plans to set up corporation to establish public sector cement plants, undertake surveying, prospecting, extracting of cement-grade limestone deposits.

Additional foreign exchange to be released to manufacturer-exporters wishing to import raw materials, components, spare parts needed to produce export products. Licenses to be granted upon review of high-level Government committee. Bond that finished products will be exported within specific period to be required.

NETHERLANDS—Imports for January-April 1964 reached $2,345 million, up 25% over same period 1963. U.S. exports were $265 million, up 32% over January-April 1963. U.S. share of imports was 10.5% for January-April 1964, compared to 10.1% for 1963 period.

Celanese Corp., Koninklijke Zout-Ketjen N. V. to establish jointly new chemical corporation. New plant, costing $28 million, to turn out range of organic products, annual output set at 135,000 tons.

SAUDI ARABIA—New Agricultural Credit Bank, capitalized at $7 million, to extend interest-free loans, guarantee other loans to small farmers, groups working for agricultural development. Short-, medium-, and long-term credits available. Medium-term loans to assist in the purchase of selective livestock for breeding, machinery, equipment, land reclamation projects.

SOUTH AFRICA—Engineering firm in Alberton, Transvaal, completes first Huber-Warco road grader under license from U.S. parent company. About 60% of components, including frame, manufactured locally; engine, transmission imported. Local firm expects to produce about 60 graders per year in response to heavy demand for earth-moving equipment stimulated by country's road building program.

SWITZERLAND—Average hourly wage of blue collar workers increased 8.2% during year ending October 31, 1963. Average monthly salary of white collar workers was up 6.2%. Due to rise in cost of living, wage, salary increases were 4.2 and 2.3% respectively in real terms.

SYRIA—Location of first 7 silos in AID-financed $14.7 million grain silo construction program announced by Government. First project to be 100,000 mt. capacity terminal silo in Aleppo; others of 5,000 tons capacity planned for neighboring towns. Tenders for construction of these silos not yet published.

Sperry Gyroscope Co., Ltd., British firm, selected by Government to develop mechanical lentil harvester suitable for country. After year of experimenting, firm developed harvester to increase lentil yields, permit more frequent rotation of lentil, grain crops. Harvester is expected to cost about $2,500 when mass-produced.

THAILAND—Cabinet reported to have approved concept of new highway plan to replace original 8-year plan. Revisions calculated to increase total km. of trunk lines by reducing per km. costs and provide for emphasis road construction in southern Thailand, especially in terms of asphalting arterial roads.

YEMEN—Installation of new generator enables Municipal Electric Co. to provide Hodeida with 24-hour electric service. Hodeida is third Yemeni city to have such service.

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the cover

A U.S. Trade Mission went to England and Scotland carrying scores of business proposals in the fields of electronics and automation. Members interviewed almost 250 businessmen in the United Kingdom, developed dozens of specific leads for U.S. exporters. Beginning on page 2, the U.S. businessmen report their findings. The trade leads, as well as news of a forthcoming exhibit at the U.S. Trade Center in London, also are published in this issue.

International Commerce

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July 13, 1964 — Volume 70, Number 28

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WAVES ON CAMERA: Waveforms being checked at Liverpool in a transistor diode logic section of the XL2 processor, made by Tektronix, Inc., Portland, Ore.

Advanced electronics

British industry modernizing; market stronger for unique equip ment than for standard

By L. H. NIEMANN
Mission Director

The United Kingdom presents challenging opportunities for sales of advanced U.S. electronic and automation equipment and components, and for U.S. marketing and management techniques.

L. H. NIEMANN

The U.K. position in world electronics production is second only to that of the United States, though the gap is substantial. Britain produces about 8%; the United States, some 60%.

Expansion of U.S. electronics-automation exports to the U.K. depends largely on the ability of U.S. firms to offer advanced or unique products. Competition will be difficult in standard items, as imports are dutiable up to 33⅓%.

A practice that may be expected to continue is the U.K. production under license of a U.S. product after it has lost its complete uniqueness.

Much of the growth of electronics in the United States can be attributed to Government financing for major defense and aerospace programs. This has contributed significantly to progress in the quality, reliability and overall performance of systems and components.

Similar Government support has not been such a strong contributing factor in Britain. Technology, in the absence of comparable mass markets, has lagged.

U.S. electronic products generally are considered superior and are widely accepted in the U.K.

Instrumentation, computers, process and numerical control systems and advanced microcircuitry components seem to offer the best potential.

During its May-June itinerary, the U.S. Electronics and Automation Mission to the U.K. visited the highly industrialized cities of Birmingham and Glasgow. Business Information Centers were maintained for a week in each of these cities. In addition, the group participated in seminars and meetings with chambers of commerce and industrial groups, visited plants and held discussions with business executives in industries other than electronics.

A Business Information Center was established and staffed by Mission personnel at the Instrumentation, Electronics and Automation Exhibition at Olympia in London, May 25–30.

In its travels, the Mission observed what the British press calls a "moderate boom" in the economy.

Unemployment is at a level of less than 2%, yet the press and other sources seem to deplore "consistent failure to increase productivity at a sufficient rate."

The *London Times* of May 31 attributes this shortcoming chiefly to failure to invest sufficiently in new technological advances, and the weakness of management and management training. The *Times* says

U.S. Mission to U.K. brings back 175 leads

A U.S. Electronics and Automation Trade Mission to the United Kingdom visited London, Birmingham, and Glasgow May 9-June 5.

The Mission interviewed almost 250 businessmen, toured 28 plants, visited the Engineering Departments of three Universities and participated in several press conferences and radio and TV programs.

Of the 148 Business Proposals of U.S. firms presented by the Mission, 86 were of interest to individual British businessmen.

About 175 specific leads developed by the Mission are reported in the World Trade and Investment Opportunities sections of this issue of International Commerce. Reports from the six members are presented on this and following pages.

Kenneth P. Finnerud, of the Commerce Department's Trade Missions Division was Trade Development Officer for the working group.

that "there is still far too little understanding of the part that modern equipment and methods can play in improving both quantity and quality of output."

Mission concurs

The Mission concurs in such views, with emphasis on rate of increase in productivity. Modernization of U.K. industry is taking place, aided by Government incentives such as depreciation allowances and building grants.

The views and observations of the individual members of the Mission—resulting from interviews, plant visits and discussions with industrialists and civic officials throughout the itinerary—are presented on this and following pages.

the author

Mr. Niemann, Director of the U.S. Electronics and Automation Trade Mission to the U.K., is Acting Director of the Electronics Division, Business and Defense Services Administration, Department of Commerce. Previously, Mr. Niemann had been with the Red Bank Division of the Bendix Corp., the Electronics Division of the Columbia Broadcasting System, and the Product Development Divisions of Sylvania Electric Corp. and Philco Corp.

Fast-growing U.K. industry sparks opportunities for sales, licensing, joint ventures

Emphasis on plant modernization, automation, product diversification; brisk gain in electronic imports

By THOMAS P. COLLIER

Thomas P. Collier & Associates, Los Angeles

The presence and influence of electronics are spread over almost every field of business in the United Kingdom.

THOMAS P. COLLIER

Britain is the largest producer of electronic products in Europe and claims an estimated annual production—including telephone and telegraph equipment—of almost $1.5 billion.

There are about 450 producers of electronic equipment in the U.K. Almost all of them manufacture products in the capital-equipment segment (telecommunications, 2-way radio, broadcasting, radar, computers and industrial electronic equipment).

Through mergers and acquisitions, there has been a consolidation of this sector. Well over 75% of total production of electronic capital equipment is accounted for by less than 30 companies or groups of companies.

The radio and television equipment sector of this fast-growing industry likewise has consolidated. Almost half of U.K. production reportedly is in the hands of 6 groups.

Burgeoning sales

Sales of electronic products in Great Britain have increased at an average rate of 9% a year over the last 10-year period (1954-1964)—more than twice the growth rate of the economy as a whole.

Increasing emphasis on plant modernization, automation and product diversification will create expanded business opportunities for alert U.S. firms to market, license or joint-venture manufacture their equipment or components in the U.K.

Electronic imports in the first quarter of 1964 amounted to $50 million, a 25% gain over the corresponding period of 1963. Not all of this comes from the United States, but herein lies the opportunity and challenge for U.S. exporters.

To pinpoint the marketing possibilities in the U.K. for U.S. manufacturers, it is important to look at the product groups and their import volumes.

Gains were achieved in virtually all groups. In the capital equipment sector, imports of radio and television transmission equipment, navaids and communications equipment (including radar) rose from $8.76 million in the first quarter of 1963 to $10.5 million in the current year.

Imports of telegraph and telephone equipment were higher at $11.7 million compared with $10.8 million. In electron tubes and semiconductor devices there was a substantial import gain of more than 50%. Imports of electronic computers and data processing equipment increased nearly 30%, from $7.5 millon to $9.7 million.

Industrial electronic control equipment showed a marginal gain during the quarter from $788,200 to $839,400, but there was a falling off in instruments and test equipment from $2 million to $1.9 million.

Imports of transistor radios, nearly all from Hong Kong, were more than doubled at $2.7 million against $1.35 million. The radio receiver and television group as a whole increased from $2.8 million in the first quarter of 1963 to $6.4 million in the current year.

Audio equipment imports rose slightly to $5.4 million from $5.3 million and Britain bought more piezo-electric quartz from abroad—$247,500 worth compared with $204,100 in the previous year.

If the present high trend of electronic imports continues, the final 1964 total is likely to reach $196 million or even more, compared with nearly $179 million last year.

For complex operations

In general, export potential for the U.S. manufacturer is in the more advanced, highly sophisticated instruments and components which are required for complex testing, analyzing, measuring or controll-

COMBINED EXHIBIT: The U.S. Embassy and the Electronics and Automation Trade Mission teamed up to present a cooperative display which included a reference library attracting many interested visitors.

ing operations. The new components which make such equipment possible also will be in demand for import into the U.K. This field is recognized as a major growth category.

All sections of the U.K. are interested in medical electronics. The United States now supplies 22% of imports and it is predicted that U.S. exporters should have close to 40% of this business by 1968.

Another growth area, mainly for licensing and joint venture opportunities, lies in radio communications. Demands are developing within U.K. police forces for the use of two-way VHF pocket radio equipment. Experiments have been carried out by U.S. and British firms which have clearly established interest.

U.S. has advantage

The United States, by virtue of its large application of this equipment and its emphasis on extremely small, lightweight, sensitive and reliable equipment and components, has a decided advantage. The need and ability to set up 24-hour, 7-day-a-week servicing and maintenance shops, however, is an absolute essential. Such independent facilities do not now exist in the U.K.

One large British company virtually dominates the entire U.K. market for mobile, portable and personal radio. Its success remains unchallenged due, among other things, to its extensive service, spares and maintenance shops. Rental of mobile radio communication equipment is also fairly widespread.

The current market for hand-held sets for various types of users ranges between 10,000 and 30,000 units. The British Home Office reportedly is seeking bids from U.K. manufacturers for a substantial quantity of personal portable 2-way VHF radios.

Television transmitters and studio equipment present another growth market in the U.K. The BBC may require as many as 250 new main transmitters in changing the 405-line system of TV to the 625-line standard, and in providing for second channels for both BBC and the independent network (ITV). A number of new lower powered booster transmitters also will be needed to reach the fringe areas.

Color TV, too, will present new opportunities and challenges to the makers of transmitting and studio equipment, as well as to the set manufacturers. Some complications may be envisaged about 1967 when, in this compact U.K. market, there will be TV transmission and receiving sets for 405 lines, 625 lines and color.

The U.K. electronics industry is characterized by a smaller number of firms and a considerably smaller scale of operations than that of the United States, but its character is rapidly changing. As sales to the European Free Trade Association and the European Common Market continue to expand, the competitiveness of the U.K. electronic industry will be challenged in home and export markets.

The U.S. exporter, or his U.K. affiliate —wholly owned subsidiary, or joint venture partner or licensee—must keep ahead in every phase of marketing, manufacturing and innovation. The factors of quality of product, originality of design, promotion, delivery and servicing will make the difference between success or failure for the U.S. company in the expanding U.K. electronics market.

The U.S. firm which achieves a technological "first" will find it has both an opportunity and an advantage for getting firmly entrenched in the U.K. market.

Prefer to leapfrog

The Mission repeatedly found that U.K. manufacturers prefer to buy specialized products, or take license to manufacture them, rather than to spend the time and money needed to develop them. They wish to leapfrog their competition, since in the rapidly changing electronics industry time is of the essence.

The U.S. electronics industry can and must offer fast delivery, a distinct advantage over other countries who are also competing for a share of the expanding U.K. market for electronics, automation and components.

The type of market the U.K. presents to U.S. manufacturers can be described this way: It is a market for sophisticated or advanced products of high quality and high reliability. It is definitely not for shelf items or standard products. Most of these can be made at lower cost in the U.K. Proper market research and marketing and sales techniques successful in the United States will provide the U.S. competitor with a distinct advantage.

The U.K. market is gradually changing, as the less complex items with the larger volumes come to be manufactured or licensed in the U.K. Price is not a primary consideration for the technically advanced item. What counts is quality, reliability and prompt delivery.

the author

Mr. Collier has recently established his own consulting firm in Los Angeles after long experience in electronics and overseas operations including marketing, manufacturing, licensing and investment. He has been with International General Electric, Motorola Overseas Corp., and other companies. Widely traveled, Mr. Collier speaks Spanish, Portuguese, Italian and French.

Strong sales potential in U.K., especially for capital goods

British industry unable to supply best product for every need; U.S. ingenuity in production, marketing required

Excellent sales potential is foreseen for U.S. electronic products in general and capital equipment in particular in the United Kingdom.

Although the British electronics industry has been growing rapidly, it is unable to supply the best product for every need, the U.S. Embassy in London reports. U.S. suppliers should be aware that competition with the Common Market countries and Japan for a larger share of this growing market will require the best in know-how and ingenuity in production and marketing.

Growth of the British electronics industry over the years has been impressive. Ministry of Aviation statistics show an increase of 200% in production of capital equipment and 350% in production of valves and transistors for the years 1954-62. Total electronics production including defense and component products has grown from $487.2 million in 1954 to $842.8 million in 1962. Although the shortage of skilled labor will tend to limit expansion, the National Economic Development Council (NEDC) forecasts increasing production over the 1961-66 period at a compound rate of about 9% a year—well above the prediction for industry as a whole.

Industrial goods in demand

The principal demand is expected to continue to be for capital equipment for industry and Government, with emphasis on computers, industrial television for process monitoring, mobile radio transport control, data transmission and recording and industrial controls.

Although the number of installed computers (750) is low in comparison with the United States figure, a substantial increase—perhaps as much as 50% annually—is forecast. Reports of forthcoming orders for computing equipment by U.K. Government Departments indicate a market worth many millions of dollars in the next few years.

Control equipment and measuring and testing equipment also is recognized as a major growth category. According to a market survey by Comart Research, Ltd., London, demand for such equipment should nearly triple over the next 5 years.

To facilitate conversion of the existing pattern of television to 625-line on UHF, the British Broadcasting Corporation may need as many as 250 new main transmitters in the next few years as well as a number of lower powered booster transmitters to provide good reception in areas formerly out of reach of the main stations.

Because of the close association of the British semiconductor industry with that of the United States, forecasts for sales of semiconductors are based on current U.S. trends. Using a ratio of 10:1, the U.K. semiconductor sales potential is estimated at about $61.6 million for 1964. Assuming a 10% growth rate a year, the semiconductor market would reach $112 million by 1970. Allowing for possible deterring factors that may slow down expansion, a 10% growth rate appears to be a safe prediction.

U.S. imports are in a strong competitive position at present, but to maintain and increase their share of the market U.S. manufacturers may need to develop industrial electronic products specially tailored to British needs and limitations and maintain high standards of sales performance and service.

The consumer sector of the industry has lost its dominant role, and capital equipment, together with defense products, is now of greater importance in the United Kingdom. As a single category, however, consumer products accounted for the largest share—31%—of total production of the electronics industry in 1962.

Prospects for future sales of television sets are closely tied to the conversion to 625-line TV (as against 405-line at present). It is estimated that by 1966 60% of the population will be covered by the more advanced transmitting, making 80% of existing sets in the London area obsolete. This augurs well for sales of 625-line black-and-white receivers, VHF sound receivers and later, color TV sets.

The success of radio sales in the future is linked, in part, to an expansion of VHF, FM broadcasting. Although about one-third of the lower priced pocket-size transistor-radio market is dominated by imports from Japan and Hong Kong, the market for higher priced, portable sets seems to be more open. Only one in every five U.K. households is said to own a record player, so the growth potential in this field is substantial. Also, battery transistor players are becoming increasingly popular with teenagers.

U.S. a major supplier

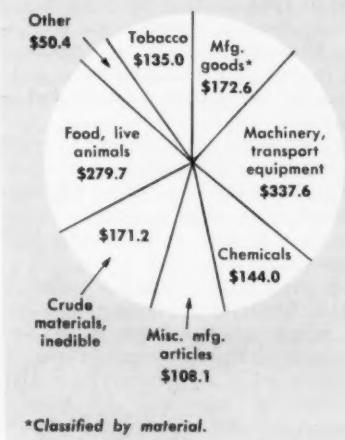
While British exports expanded by about 90% from 1956 through 1962, imports of electronic equipment for the same period increased over 200% and reached $96.9 million in 1962. Preliminary figures indicate a 50% increase in 1963 over the previous year.

The United States is a major source of supply for many electronic products, particularly professional-capital equipment and advanced components. Nearly half the computers sold in the U.K., for example, are imported from the United States, and U.S. firms supply about 40% of all imports of electronic control and measuring equipment.

The number of U.S. manufacturers with agency-distributor arrangements in the U.K. is estimated at 500.

To promote sales of U.S. electronic products in the U.K., the U.S. Trade Center in London will exhibit electronic control devices for industrial machinery December 8–18. Products such as electronic eye devices, color sensing and temperature control equipment, and dampness testers will be featured.

Industrial equipment is major U.K. import from United States



*Classified by material.

U.S. electronic components well regarded in U.K.; good market for advanced products

Though 1963 British output hit peak, imports of tubes and semiconductors rose 56% in first quarter of '64

By BERNARD ZINOBER
Johnson International Publishing Corp.

As industries go in Great Britain, electronics is a baby. But it's one of the bounciest babies about which the British can boast.

BERNARD ZINOBER

Electronic equipment production is climbing at a record rate. The country's National Economic Development Council (NEDC) predicts that it will grow at a compound rate of 8.7% until 1966—more than twice as fast as the U.K. economy as a whole.

Exports from the electronics industry—normally a barometer of its health—are likely to be even higher. The NEDC forecasts that they will rise by 10% a year—about four times higher than the rate at which total British exports increased last year.

Components at peak

Along with the rest of the industry, the components sector hit an alltime peak in 1963. Statistics are difficult to come by, but some sources place production levels in 1962 at about the $383 million mark, up from $358 million the previous year. These figures include components used in professional, domestic and audio equipment, and defense contracts and replacements.

In addition, about $140 million worth of components not contained in equipment and $64 million worth of tubes and semiconductors were produced. Indications are that there was a further 10% increase in 1963.

U.S. firms have a strong foothold in the U.K. electronics industry. According to a recent survey by one of Britain's top industrial research organizations, at least 20% of U.K. electronics is U.S. controlled or influenced. In general, American designed or manufactured components are highly regarded, and there is a tendency to look across the Atlantic for new ideas and developments.

Nowhere is this more evident than in semiconductors. Most of the "big names" of the U.S. semiconductor industry are deeply enmeshed in the U.K. market through manufacturing subsidiaries, joint ventures, sales and servicing groups or distributor arrangements. These companies are competing, successfully, in the face of a highly sophisticated and technologically advanced group of British semiconductor producers.

According to the editor of one of Britain's major publications in the components field, two of the "big three" in the U.S. semiconductor industry enjoy the same stature in the U.K., and the third—a later starter—is moving up rapidly.

Room for more

Still, there appears to be a market potential for other U.S. semiconductor producers. Numerous British sales agents and distributors interviewed by Mission members expressed the opinion that advanced semiconductor devices, including all types of transistors, diodes and SCRs could be sold. In addition, at least one firm was interested in manufacturing semiconductors under U.S. license.

Import statistics for the first quarter of 1964, published by the British Board of Trade, seem to confirm this bullish outlook. The tube and semiconductor category reached $9.04 million—a 56% increase over the same period in 1963. An overwhelming proportion of these devices came from the United States. At the same time, exports in the same category fell to $8.68 million—a 9% decline.

Another factor contributing to the promising outlook for semiconductors is the accelerating rate at which British instrument and communications equipment manufacturers are switching over to solid-state designs. This augers a continuing market for advanced professional type semiconductors.

Britons generally attribute the success of U.S. component manufacturers to three factors:

The massive expenditures in the United States for research and development on electronics for defense, space and industrial programs, which has spawned both a host of new products and improvements of more conventional items;

The broader scope of the U.S. electronics industry (considered by Britons to exceed theirs by a 10.1 ratio) which permits development costs to be spread over a wider base and produces lower unit costs than can be achieved by the U.K. industry;

Short delivery dates made possible by the ability of U.S. firms to build and maintain larger inventories.

Like U.S. components

Whether one accepts one or all of these reasons, the fact remains that Britain's electronics industry is well disposed toward U.S. components. A recurring theme in conversations held by Mission members with U.K. electronics industry executives was, "Of course, the United States is 2 to 5 years ahead of us in component design and application."

Like all generalizations, this one is built partly on fact and partly on extrapolation. It must be borne in mind that the U.K. possesses a highly sophisticated and technologically advanced electronics industry, ranking only behind the United States as a producer of high quality electronic products.

The nation's research is first-rate, and its engineering application only slightly behind. Thus, while British firms will and do use U.S. components, run-of-the-mill items which do not stand out against locally produced products, either through newness, higher quality or lower price, stand little chance of competing successfully for a share of the U.K. market.

Marketing of other types of components—resistors, capacitors, potentiometers, connectors, inductors, transducers, CRTs, delay lines—generally follows the pattern outlined for semiconductors. In practically all areas, U.S. firms are either manufacturing through subsidiaries and/or joint ventures or selling successfully through agency arrangements. But here again, the U.S. products must handle the job better, faster or cheaper than a British-made component to be accepted.

Microwave components

The outlook for microwave components appears less promising. The United Kingdom, which pioneered radar and microwave development, has a highly advanced industry of its own. Her knowl-

edgeable equipment and component designers have stayed on top of current trends, making it difficult to compete with British manufacturers, particularly in their home ballpark.

In 1962, the commercial market for microwave equipment of all types was $22 million, of which the United States accounted for less than 10%. Mainly, American components used by the U.K. microwave industry consisted of highly specialized devices, such as cathode ray tubes for read-out purposes, solid-state microwave devices and some long-life magetrons and klystrons.

It seems doubtful that the United States can increase its present market share, except possibly through licensing and/or joint venture agreements.

Significant development

One significant development at the Instruments, Automation and Electronics (IEA) Exhibition at Olympia, London was the U.K. industry's keen interest in microcircuitry. As yet, microminiaturization is still largely a gleam in the average research engineer's eye, but slowly it is beginning to move into the hardware phase.

For example, Marconi's new computer, known as the Myriad, incorporates integrated circuits in its logic modules. The new computer is said to be 10 times faster than the Mentor which it supersedes.

With the current drive in the U.K. toward plant and process modernization, the growth in new applications for measuring and controlling equipment, and development of new electronic products offering improved reliability accuracy, demand for advanced components should continue to expand. And it appears probable that the U.S. industry's technological design and reliability of components, plus its more aggressive and efficient marketing methods, will provide an increasing share of the U.K. market.

the author

Mr. Zinober has been editor of International Electronics, *a monthly publication which serves the electronics and communications industries throughout the world, since 1960. From 1955 to 1960, Mr. Zinober was associate editor of* Industrial World, *a sister publication of* International Electronics. *Mr. Zinober formerly headed the Technical Information Service of Eutectic Welding Alloys Corp. and was on the staff of the Colby Advertising Agency.*

THE ONCE-OVER: Birmingham plant's milling machine is inspected by mission member (left) J. M. Fluke.

Industrial developments in U.K. seedbeds for advanced technology in computer, automatic controls

Plant modernization, growth in manufacturing and capital goods output, investment strengthen market potential

By E. M. GRABBE
Bunker-Ramo Corp., Canoga Park, Calif.
and
JAMES MURRAY
Murray Associates, Washington, D.C.

Throughout the U.K., a confident optimism prevails in the area of industrial computer information handling and numerical control of machine tools. There are good reasons for this attitude.

Plant modernization and large- and small-scale manufacturing are increasing, and in general capital goods output is expected to rise in value an estimated 60% by 1966. Investment in research and development by industry and Government is continuing at a good pace. These are the seedbeds for applications of advanced technology to computer and automatic controls in industry.

In the U.K., more than 45 process control computers are installed or on order in the major industries of petroleum, chemicals, power, metals, paper and cement. Power generation leads in the trend toward higher productivity and application of the computer for monitoring and automatic start up of plants in the 500-megawatt range.

In several areas, the U.K. has led the world in applying computer control: Use of on-line computers for production control and scheduling of integrated steel plants (Richard, Thomas Baldwin and Park Gate Steel), control and scheduling of cold rolling mills (Steel Co. of Wales) and overall control of a small integrated refinery (British Petroleum).

Industry-wide research associations, such as British Iron and Steel Research, have played an important role in these advanced applications.

Worldwide sales of process control

U.K. trade in electronic equipment climbs

(millions of dollars)

	Capital equipment (including defense)	Consumer goods	Valves	Other components	Total
Exports					
1958....	57.4	36.68	14.84	25.48	134.4
1959....	74.2	34.44	18.76	28.00	155.4
1960....	75.04	30.8	19.88	38.36	164.08
1961....	87.64	34.72	28.0	41.72	192.08
1962....	101.92	41.16	32.76	39.48	215.32
Imports	([1])				
1958....	11.48	9.52	7.84	10.36	39.2
1959....	16.8	16.52	15.96	9.24	58.52
1960....	19.32	17.64	16.8	12.88	66.64
1961....	25.2	22.12	15.96	13.72	77.0
1962....	32.48	30.24	17.92	16.24	96.88

[1] Excludes electronic computers. Source: Ministry of Aviation, London.

computers have reached almost 500, and the U.K. ranks high in applications. Computer control of British steel plants, power stations and chemical installations is active and the market is shared by both U.K. and U.S. manufacturers. Market opportunity is dependent largely upon know-how in process analysis and application in plants developed in the United States within strongly established basic industries.

At the Instruments, Electronics and Automation Exhibition in London last May, three companies exhibited process control computers designed and built in the U.K. One of these exhibited computers designed in the United States but built in the U.K., and another exhibited U.S. built computers. More than 12 companies are competing for the U.K. computer control market, and more than half of these are U.S. firms.

The Mission visted steel, shipbuilding, automotive and electronic plants where feasibility studies were needed for incorporation of computer control and automatic transfer devices. The future and success of computer control in the U.K. lies in the planning and system design approach by both user and manufacturer.

Data logging

There is a good market for data loggers and alarm scanners for customers who wish to enter the digital control field by recording data for later study without incurring the cost of a control computer. These users become good prospects for computer control systems.

A new area on both sides of the Atlantic is the use of data loggers for marine application. Such studies are aimed at more efficient ship machinery operation, and eventually will lead to computer control. The market should be watched for future developments since the U.K. is the world leader in shipping.

Numerical control

Numerical control (NC) of machine tools is expanding in the U.K. as in the United States. About 400 point-to-point systems and about 50 to 60 contouring systems are in use in the U.K.

As a user of NC, Britain certainly is next to the United States, where about 2,500 point-to-point systems and 1,000 contouring systems are installed or on order. In the U.K., as in the United States, the first markets have been for aircraft or military applications, followed by industrial applications.

One markedly different characteristic is in Government support. The British Government has not provided financial assistance for development of numerical controls, and has not purchased NC systems used by contractors in the aerospace industries. Programs have been less ambitious and lower cost systems have been developed, especially in contouring. As a result, U.K. manufacturers' systems are in price more oriented to U.K. and European industry.

Many U.S. companies have second-generation low-priced systems which should have an excellent market in the U.K. There is also opportunity for licensing for manufacture in the U.K. as the market develops.

Ferranti resourceful

As an example of development in the U.K., the Ferranti Numerical Control Division at Dalkeith, Scotland, visited by members of the Mission, illustrates the aggressive application of know-how to closely related fields.

Ferranti entered the numerical control field in 1956, and after a half-dozen years and substantial investment had made little progress in developing the market. Techniques for determining machine table position use Moire fringe optical gratings so that positions to 0.001 inches can be measured easily.

Waiting for the NC applications to "take hold," Ferranti began marketing the position measurement device as a separate item and also incorporated it in a coordinate inspection machine with digital read out of dimensions.

Both of these products have found ready markets in the U.K. and the United States. Last year, the Ferranti NC Division increased its business by 88% and predicts about 45% growth for 1964. First installations were on standard machines but at least four U.K. machine tool manufacturers are making special machines for NC.

In the U.K., about 50% of sales are to the aerospace industries. Diemaking in the automobile industry and machine shop subcontractors are important segments of the market.

The Ferranti system uses a curve generator for a ¼-inch magnetic tape. A computer is required to prepare a punched tape for input to the curve generator, and Ferranti has developed its own automatic programing for this purpose. Only a few tape preparation centers are in operation. Sales outside of the U.K. are developing. The cost of these units is high, but the final director set is simple, reliable and low in cost.

U.K. industry is beginning to think in terms of NC. Several U.S. companies are already active. There has been a steady increase in demand for skilled workmen in the U.K. NC can provide one solution to this shortage and assist Britain in her surge to increasing productivity.

New instruments in the U.K. are in the area of sensors, controllers, flow converters, recorders and electropneumatic transducers. Highly specialized, these automatic controls can apply to many industries and are marketable according to the capital outlay the user is prepared to invest and his specific requirements.

Several U.K. companies are in the process instrument field, and share in a good market. These companies seem to lack a well rounded line, especially in continuous analyzers. Competition is strong in this growing industry, and with the expanded use of control instruments in the basic design of new plants, centralized and remote control systems assume added importance.

Automation moves forward in smaller U.K. industries

For those not large enough for specialization, flexible equipment is needed

By E. M. GRABBE

Britain is in a period of relatively low unemployment during which many industries are moving ahead in advanced technology and automation. These pressures for modernization arise from competition with the European Common Market and other industrial countries, a strong desire to maintain position in world markets, and the rapidly rising standard of living which has increased the demand for products for consumption within the U.K. Labor is not strongly opposing automation in industry. Most political forces seem to support the use of advanced technologies. In areas of relatively higher unemployment, such as Scotland, incentives are offered to attract new industries. Any new plants established in such areas are likely to be designed for fully automatic production.

E. M. GRABBE

Market for flexible equipment

The steel industry, which may be completely nationalized if the Labor Party is successful in the next elections, has been moving ahead swiftly in applying automation to demonstrate clearly that private enterprise can do an outstanding job. Other industries are slowly, but deliberately, modernizing their facilities.

Many industries in the U.K. are not large enough to undertake specialized developments in automation. As a result, there is a considerable market for flexible standard materials handling, automatic feeding and packaging equipment. Many other types of associated equipment are needed, including plant measurement and test equipment.

Light industry modernizes

Several light industries which appear to be advancing quite rapidly were visited in Birmingham. One of these was the plant of Joseph Lucas, manufacturer of electromechanical parts for automobiles. The Lucas plant uses numerically controlled contouring machines for making dies for metal casting—an excellent application as the intricate dies operate at high production rates and must be replaced frequently.

Tape controlled turret type drilling and boring machines were also in use. Automatic semi-continuous operations were stamping, welding, machining, grinding, polishing, and testing. Some automatic assembly machines were in operation, but much assembling was still by hand on continuous conveyors.

The Lucas engineering department has a large development group which combines standard material handling machines with special purpose mechanisms to automate process steps. The latest products show clearly that automated production and standardization for long product life were key considerations in design.

Cadburys, Britain's foremost candy maker, markets a product subject to the whims of the public taste for sweets. Under these conditions, and with new competitive products vying for the market, standardization is difficult.

Flexibility is the theme that pervades Cadburys approaches to automation. Much of the material preparation and candy manufacture is automatic, but the feeding of machines is largely by hand and is monotonous.

High volume products, such as chocolate bars, are made on highly mechanized lines, although final packaging is done by hand. Another problem is the automatic combination of wrapped candies in exact proportions to provide assortments in boxes or cans.

Piecemeal application

From discussions with British industrialists, one concludes that there has been a strong tendency to apply automation in a piecemeal fashion. This may produce short-term gains, but the real benefits come from modernizing plant layout, and designing products and system for automatic manufacture.

Production engineers in the U.K. tend to be specialized, and it seems that complete cooperation between mechanical and electrical engineers is not always easy to achieve in designing complex systems which cut across traditional engineering lines.

Often the capital investment involved in revamping a factory laid out for manual operations is high, and a changeover disrupts production.

These deterrents, plus the present wave of comparative prosperity in the U.K., combine to delay installations of large automation systems.

the author

Dr. Grabbe is Director of International Computer Sales for Bunker-Ramo Corp. He has specialized in the application of complete automation to industrial plants, with emphasis on computer control systems and numerical control of machine tools. Dr. Grabbe returned to the United States in 1962 after having spent 2 years as managing director, International Systems Control, Ltd., Middlesex, England, and vice president and director, Compagnie Europeenne d'Automatisme Electronique, Paris.

Government representation

The Commercial Department of the British Embassy in Washington, D.C., is located at 3100 Massachusetts Avenue NW.

The British Government maintains consular offices in Atlanta, Ga., at 240 Peachtree St. NW.; Baltimore, Md., 211 E. Pleasant St.; Boston, Mass., 200 Berkeley St.; Chicago, Ill., 200 S. Michigan Ave.; Cleveland, Ohio, 1828 Illuminating Bldg.; Denver, Colo., 1615 California St.; Detroit, Mich., 1512 Guardian Bldg.; Houston, Tex., 1520 Texas Ave.; Honolulu, Hawaii, Room 226, Dillingham Transportation Bldg., Bishop St.; Kansas City, Mo., 922 Walnut St.; Los Angeles, Calif., 3324 Wilshire Blvd.; Miami, Fla., 723 Ingraham Bldg., SE. Second Ave.; Minneapolis, Minn., 1900 First National Bank Bldg.; New Orleans, La., 225 Baronne St.; New York City, 845 Third Ave.; Norfolk, Va., 712-720 National Bank of Commerce Bldg., Maine St.

Philadelphia, Pa., 12 S. 12th St.; Portland, Oreg., 715 Lewis Bldg.; St. Louis, Mo., 1221 Locust St.; San Francisco, Calif., 343 Sansome St.; Seattle, Wash., 801 Second Ave.

The British Industrial Development Office is located at 845 Third Ave., New York 22.

The U.S. Government maintains an Embassy in London and consular offices in Belfast, Northern Ireland; Birmingham, Liverpool and Southampton, England; and Edinburgh and Glasgow, Scotland.

Electronic instrument makers should study U.K. market, design products to meet needs

Long range planning, improved sales techniques in Britain should strengthen prospects for export of U.S. equipment

By JOHN M. FLUKE

John Fluke Manufacturing Co., Seattle, Wash.

The electronic instruments industry in the U.K. has made significant strides in the last 10 years.

JOHN M. FLUKE

Developments have paralleled those in the United States in some respects, although some differences will interest firms looking toward exporting their products to the U.K.

For example, company ownership differs in the two countries. In Britain, an instrument company often may be a member of a group of companies, yet it functions as a separate entity. British firms under the "group of companies" concept, with a few exceptions, tend to retain quite independent status. There seems to be little formulation of group policy, finance, marketing, purchasing, engineering, and other functions.

There is similarity, however, in that substantially no electronic instrument manufacturers are old-line electrical manufacturers who have ventured into the instrument business. Almost invariably, they have started shortly before or since World War II as new companies.

There are distinct export possibilities for U.S. manufacturers. Almost without exception, British firms look to the United States for example and guidance. U.S. equipment and practices face no real obstacles in the U.K. if efforts are made by U.S. firms to understand the customs and the needs of the potential British customer.

Product planning

Other differences in development point up a potential market for U.S. instruments.

Planning by electronic instrumentation firms in the U.K. is generally short range. The product of a firm often is selected for manufacture as the result of a specific need by a potential or actual customer, or because it is already successful. The "new product" concept and product-line coherence of U.S. firms are not emphasized, even in the larger companies.

The U.S. manufacturer needs to study the U.K. market to determine its needs. In some instances, U.S. products will be appropriate; in other instances, development for the U.K. market should be tailored distinctly to meet its needs.

U.K. manufacturers often do not question the adequacy of their products until the customer asks for something better, or until competition becomes significant.

Specifications

Most instrument manufacturers in the U.K. seem to know less than their U.S. counterparts about the performance of their products. Data or catalog sheets, with a few exceptions, are lacking in detail, and show only salient features such as output or input ranges, weights and sizes. Missing are temperature, humidity, accuracy, application and special features.

There are several reasons. Instrument producing factories often lack standard equipment. Most producers have inadequate or no standards laboratory or environmental facilities. The supplier cannot adequately determine product performance, and the customer cannot verify specifications. Exceptions exist only in a few of the more advanced firms and in Government laboratories.

With educational effort, there is opportunity for sales of standards equipment, particularly in voltage, current and resistance measurements. From the sampling taken, it is estimated that 90% of British electronics manufacturers are potential customers in this area.

Quality

U.S. instruments are considered reliable, but many British-made products are rated by users as deficient. There seem to be three main reasons for lack of quality. First, instrument design efforts have not generally taken into account the tolerance and aging aspects of circuitry.

Second, for some British components, value is not analyzed as in the United States, purchase specifications are not as rigorous and neither is inspection.

Third, workmanship does not meet necessary standards because of poor selection and training of people, and inadequate tooling.

There appears to be opportunity for sale of assembly jigs and fixtures of standard variety, including material handling devices developed to a high degree in the United States. Perhaps 75% of the U.K. electronic manufacturers would become customers for this type of equipment if a sales program of education and demonstration were utilized.

Production techniques

In all the factories visited, improved work flow would be beneficial. Many work spaces are cramped, and considering motion economy and sequence of operations, parts are frequently difficult to reach. Maintenance and lighting are inadequate. Both lighting and interior surface treatment in factories are potential areas for increased sales.

Methods, in general, and the equipment used—including stockroom facilities such as bins, racks and record keep-

Electronics show in U.K. draws record crowds

The changing picture in British industry was indicated by interest shown in the Fifth International Instruments, Electronics & Automation Exhibition in London May 25-30.

A record 102,139 visitors attended this show. Visitors in 1962 totaled 91,748; in 1960, 75,276. Of the 700 exhibitors, 148 represented overseas firms.

The 1964 IEA Exhibition had the largest showing of U.S. electronics-automation equipment ever held outside of the United States.

At the U.S. Business Information Center stand visitors were so numerous at times that an accurate count was lost. It is conservatively estimated that 1,700 people visited the BIC during the 6-day period. Of the total of 239 interviews conducted by Trade Mission members during the 4-week visit, 125 were held on the BIC stand.

ing apparatus—offer opportunities for improvement.

Factory test gear also is deficient. Much of the equipment is not sufficiently accurate. Little use is made of specialized test equipment, either of the type built from standard instruments or that built specially for the job.

Perhaps here and in development laboratories there is a tremendous potential, using constructive salesmanship, to sell U.S. instrumentation. It is essential that the customer's needs be known, and that the instructive, demonstrative approach be used.

British factory cost, comprising manufacturing direct and indirect labor and materials, seems to run from 48 to 55% in the better plants and higher in the poorer ones. Material costs run about 25 to 30%. Sales costs maybe about 20%, although they are hard to estimate. General and administrative expense, also difficult to define, ranges from 4 to 7%.

Marketing and sales

Marketing and sales in the electronics industry are materially different from their U.S. counterparts.

Marketing is largely nonexistent. Few companies have product planning programs.

Salesmanship in the U.S. sense does not generally exist. Too little is known of the customer's needs, and products are not presented on a benefit-to-the-customer basis. Many salesmen in the U.K. do not know the features of the equipment they sell.

Training of British salesmen in U.S. approaches should be most helpful in increasing sales volume in the U.K.

There are many sales representative organizations in the U.K. Most of them also engage in manufacturing to some degree. In addition, many have an excessive number of lines. Often components and instrument lines are carried by the same representative—an understandable arrangement in this comparatively smaller market.

In many instances, however, the diversification has gone too far. Manufacturing diverts too much attention from selling. Instruments and components can never be effectively mixed. Too many lines prevent comprehensive knowledge about any specific item. Lack of knowledge prevents concentrated, effective sales effort.

U.S. firms represented in the U.K. should seek to improve this situation. Sales instructions, seminars and field trips are a necessary part of the job. U.S. companies doing business in the U.K. must project the customer-benefit sales approach to their British sales staffs. Only with these efforts will the market for U.S. electronic products in the U.K. expand.

(APEX PHOTOS LTD.)

ROYAL HANDSHAKE: Prince Philip, Duke of Edinburgh (center), meets Thomas Collier of U.S. Electronics Trade Mission to the United Kingdom, as U.S. Ambassador David K. E. Bruce looks on. Scene took place at the International Instruments, Electronics and Automation Exhibition, Olympia, London, May 1964.

the author

As president and chief operations officer of his company, Mr. Fluke is responsible for overall operation of the firm which, with its wholly owned subsidiary, Montronics, Inc., develops, designs and produces precision electronic instruments. His previous business experience includes that of test engineer for General Electric Co., and development work for American Machine and Foundry Co. Mr. Fluke holds several patents.

NEW THINKING

"We aim to bring together firms on both sides of the Atlantic and generate new thinking about our problems.

"In particular we are trying to help smaller U.S. firms make contacts in the international trade field."

—Louis H. Niemann, Director, U.S. Trade Mission to U.K.

Expanding universities, technical colleges in U.K. strengthen potential for U.S. sales

Scientific, industrial measuring and test equipment of all kinds will be needed as engineering departments grow

By J. M. FLUKE
and
E. M. GRABBE

Mission members had opportunities to visit British universities in Birmingham and Glasgow, and to discuss higher education with British scientists and businessmen.

There is a surge toward expanding the universities and technical colleges, by increasing existing facilities and by the addition of new institutions. By 1965, the United Kingdom will have seven new universities.

In both Birmingham and Glasgow the technical colleges are expanding their curricula, and are receiving university status. This in turn makes room for the addition of new technical colleges.

Chances for suppliers

In examining the potential growth of universities and technical colleges in the U.K., it becomes clear that this area offers an excellent opportunity for U.S. companies to supply scientific and industrial measuring and test equipment of all types. Both standard and special electronic instruments and test equipment will have continuing strong markets in the next 5 or 6 years.

Recent figures indicate that the U.K. sends 4% of its population to colleges and universities, the USSR 15%, France 22% and the United States 28%. One may be sure that Britain will not lose time in closing this gap.

Growth in science, engineering

The major growth in higher education can be expected in science and engineering. There is growing social and political pressure for more emphasis on Britain's well-recognized competence and excellence in technical invention—indeed many British leaders look to this as the U.K.'s major resource for the future. To meet this challenge as well as the demands of the modern technical world, more scientists and engineers will be needed.

Birmingham University has strong electrical and mechanical engineering departments. Research is for both Government and industry; however, work for industry must be performed on the campus. Professors spend only a minor part of their time consulting—usually on the campus also. Low overhead is emphasized to encourage industry to support research projects.

The Birmingham engineering laboratories are well equipped, and there appears to be no shortage of funds for hardware for both undergraduate and graduate projects. The electrical engineering department has all the necessary instruments—including much U.S. equipment—for advanced work in such areas as microwaves, semiconductors and optics.

In the mechanical engineering department, the same is true for electronic instrumentation. Much pioneering work is in evidence—for example, the use of electro-mechanical explosive forces for pressure molding.

Both at Glasgow and Birmingham, laboratories and shops are well maintained. Approval of funds for needed equipment requires only proper justification. All institutions visited had heavy financial support from the national Government.

At Glasgow the Royal College of Science and Technology is about to become the University of Strathclyde. This institution has a long history, dating back to 1814, as a technical college. Today it has 3,500 students, and by 1970 enrollment is expected to reach 10,000. Investment to cover this growth will be about $30 million, it has been estimated.

Strathclyde has the largest school of business and industrial administration in the U.K. Future plans involve expansion of operation research and data processing departments aimed at training managers.

The University of Glasgow has an enrollment of 7,000. Only about 10% is engineering. The University plans further growth, including dormitories, since at present it is not a residential institution. In engineering, the usual curriculum has provided the same courses for the top (honors) students as for those who receive ordinary degrees.

Courses intensive

The courses are intensive and concentrate on teaching fundamentals. In this respect, the course content is generally superior to that in the United States.

Likewise, there is more separation in accordance with capability. At the end of the first of the first 3 years leading to a bachelor's degree, students are divided into the top or honors group and the ordinary group. Generally there is no subsequent transfer between groups, although this is possible. Degrees conferred carry the group designation.

There is no formal curriculum for the doctorate. It is assumed that the candidate will take the necessary courses. Degrees are granted on the basis of his thesis and oral and written examination. These efforts are judged on the original research content and the candidate's ability in original research. At least 3 years are required for a doctor's degree.

The University of Glasgow has received a Government grant of $300,000 for establishment of an automatic control group, and a scientific computer has recently been installed.

COMPARING NOTES: People at the U.S. Business Information Center found the exhibits stimulating.

U.K. seen as major outlet for U.S. computers, services

Hybrid equipment now being introduced in Britain

By JAMES MURRAY

The United Kingdom in the next decade probably will be a major outlet for the products and services of U.S. computer manufacturers.

JAMES MURRAY

By 1970, it is estimated, more than 4,000 computers will be in operation for both business and industrial applications. In 1963, 750 computer installations were in use and recently issued figures this year indicate an increase to nearly 900.

The value of computers installed in Europe by 1970, however, probably will be slightly more than half the computers in the United States, which number 17,000 at a monthly installation rate of 550.

One of the deterring factors in Britain has been the small gross volume as compared with the U.S. market.

Pushing hard

Also, the United States is business- and production-oriented. The United Kingdom has been industry- and science-oriented. This is changing, however, and British management is gaining confidence to push hard to harness the power of the computer in ways that will serve management productivity.

In Britain, there are now only three major computer manufacturers: International Computers & Tabulators, Ltd. (ICT); Elliott Automation; and English Electric–Leo Computers. British data processing equipment manufacturers have met the challenge of the U.S. manufacturer by both merging and building up agreements for marketing with U.S. concerns. Last September, I.C.T. acquired the computer department of Ferranti, Ltd., and markets the RCA 301 under the name ICT-1500. Another merger took place in February 1963 when English Electric and Leo joined forces. Elliott Automation Ltd. has an arrangement with National Cash Register whereby the NCR 315 is built in Britain and sold by NCR.

One trend in Britain will undoubtedly be toward small- to medium-low-priced computers in large numbers operating on traditional systems of decentralization. Computers of U.S. manufacture and label are widely accepted and the future appears even brighter when one looks in on the busy computing service center of Honeywell and Elliott.

The wide combinations of available U.S. computers, whether digital analogue or hybrid, coupled with systems engineering support know-how in data handling, offer splendid market opportunity in the U.K. This is especially true of the new hybrid computer equipment just now receiving initial introduction and acceptance in Great Britain.

So great is the stimulus given by these recent developments to the whole art of control system engineering that it is possible for the first time to achieve not only the most adaptable but economic arrangement of computing and control equipment yet produced.

Computing systems for industrial applications of medicine, paper, printing, shipbuilding, warehousing, and on-line systems for the basic industries of chemical, coal, oil and utilities show additional signs of potential market opportunity.

Apart from the well established computer manufacturers in the United Kingdom, other potential markets appear excellent for license and joint venture:

Tape testing equipment; tape cleaning and calibrating equipment; computer accessories and supplies; electronic teaching aids for schools and universities; magnetic tape supply and handling equipment; peripheral equipment, including low cost disc memory devices; high density tape units; tape conversion equipment; and low cost business input-output devices for point of sale use.

Market profile—United Kingdom

Area: The United Kingdom—England, Scotland, Wales and Northern Ireland—covers 94,205 square miles.

Population: 53.7 million (1963).

Employment: Civilian employment, April 1964, 24 million. Registered unemployment, 369,000 (less than 2% of labor force).

Principal cities: Greater London, 8.2 million; Birmingham, 1.1 million; Glasgow, 1.1 million; Liverpool, 745,000; Manchester, 659,000.

Currency: Pound sterling (1 pound = $2.80). The pound is convertible for current transactions.

Gross national product (1963): $73.8 billion.

Per capita income: Annual per capita national income, $1,251 (U.S., $2,711). Average weekly earnings of adult males in manufacturing industries, $46.49 in April 1963.

Radio and television: 3.1 million licensed radios and 12.8 million licensed television sets.

Electricity: Production, 12.8 billion kilowatt-hours in 1963. Characteristics: Alternating current, 50 cycle, triple phase.

Foreign trade (1963): Exports (including re-exports), $11.8 billion; imports, $13.5 billion. Imports from U.S., $1.4 billion; exports to U.S., $962 million.

Principal exports—machinery and equipment, road vehicles and aircraft, chemicals, iron and steel, manufactures of metals, textiles; principal imports—foodstuffs, ores and metal scrap, tobacco, woodpulp and paper, petroleum, chemicals, machinery and equipment.

Principal trading partners: Imports—United States (10%); British Commonwealth (32%); EEC (16%). Exports—United States (9%); British Commonwealth (30%); EEC (20%).

the author

Mr. Murray is president of Murray Associates, Washington, D.C., engaged in management, industrial and technical consulting services for a diversified portfolio of research and industrially oriented clients.

In 1960, Mr. Murray was an executive and marketing consultant to Beckman Instruments Co., and earlier served as senior UNIVAC representative for the Sperry Rand Corp.

PERSONAL CONTACT IS BEST WAY: John Fluke (right) of U.S. trade mission interviews British executive.

Shipping industry takes to automation ashore and afloat

In engine room, bridge, shipyard suppliers have chance for sales

By JAMES M. MURRAY

Great Britain's shipbuilding industry ranks second in the world. Last year's production reached 1.25 million gross tons.

Japan, the leading producer with 2.4 million gross tons, is now the foremost competitor and is severely challanging this old-line British industry.

A closer look among the three leading producers of the world, Japan, Britain and West Germany, indicates that this pattern of world production of new tonnage will continue. Rising production costs in shipyards however may have an effect on this distribution of the market. Ships today are designed with sophistication demanding a high degree of shipbuilding art. Powered by diesel engines, extensive automation is now employed in both the engine room and the bridge.

In Glasgow, where Mission members visited and talked with shipbuilders, general reduction in the number of yards is evidence in favor of larger yards—designed to meet specialized requirements. Shipbuilding skills appear in economy of design, company management and efficiency in construction. Faced with increasing costs, the industry is adopting a more realistic approach to the use of automatic control and shiphandling systems.

More automation

Automation is advancing in many ways in shipyards in the U.K. One leading yard visited, Lithgows Group Ltd., is employing data loggers, bridge control and automatic preprogrammed cutting tools for ship construction. The computer is also being used for production control, materials scheduling and eventually hull design.

The opportunity for remote control of propulsion systems, and cargo handling of both liquid and dry materials, are areas for future sales opportunities in this competitive industry.

Many vessels, such as tankers, cement carriers and trawlers are suited for the application of automatic self-discharging equipment, and offer opportunities for electronics applications to their operations.

Thus, computers are finding a place in the shipping industry, both ashore and afloat. Data loggers for monitoring ship machinery, engine control, and digital computing equipment for radar control are among the many essential functions envisioned in the near future.

Ullage measurement equipment, and electronic systems for automatic measurement of fuel flow for loading and discharge equipment offer opportunities to supply a variety of electronics gear to this industry. In addition, automatic pilot systems, MF direction finders, operations recorders and alarm scanners are categories that offer excellent potential for U.S. suppliers to shipbuilders.

Finance firm in Pakistan receives World Bank loan

A World Bank loan equivalent to $30 million has been made to the Pakistan Industrial Credit and Investment Corporation, Ltd., (PICIC), to provide about half the foreign exchange required until the end of 1965 for loans to new and expanding industries.

PICIC, a privately-owned organization, is a leading institution in Pakistan for provision of medium- and long-term finance for private industry.

It was established in 1957 by Pakistani and foreign investors, with World Bank assistance, to assist in the creation and expansion of private enterprises, to encourage domestic and foreign participation in industries and to help create a capital market. Up to December 31, 1963, PICIC had approved 361 loans amounting to $115.7 million.

The World Bank loan does not have a fixed schedule for repayment or a fixed interest charge. Each part of the loan committed for a particular project will be repaid in semi-annual installments, according to a schedule determined at the time of commitment. The loan is guaranteed by the Pakistan Government.

HYDRAULIC PRODUCTS WANTED

Manufacturer of hydraulic equipment is interested in an arrangement with U.S. company for the manufacture under license of a hydraulic or associated type of product requiring close tolerance precision machining and fitting.

Items include: axial piston, radial piston and ball hydraulic pumps; hydraulic motors; hydraulic accumulators; single, double-action, self-signalling hydraulic actuators; mechanical, solenoid, servo hydraulic valves; hydraulic intensifiers; precision gear box units.

Write: Mitchell Hydraulic, Ltd., Albert Dr., Sheerwater, Woking, Surrey, England.

CONSISTENT

The U.S. share of free-world exports since 1951 ranged from 17% to 18%, with the exception of 1957, the year of the Suez crisis, when the U.S. share was 19.6%.

CABLE CHECK: An operator checks a telephone cable in England, line by line, for conductor continuity, conductor resistance, and insulation resistance.

British engineer reports on interdependence of U.S. and U.K. electronic industries

On basis of international cooperation sees tremendous possibilities for future progress in submarine cable networks, space exploration, air traffic control, etc.

By W. D. H. GREGSON
Chairman, The Electronic Engineering Assn., London

The national electronic industries in the free-world are inevitably becoming more and more interdependent. The reason for this is not hard to find, for the exceedingly complex nature of electronic developments and the special marketing problems they evoke are decidedly against any idea of national self-sufficiency in this vital area of industrial and business activity.

Electronics as a really beneficial world industry can only evolve on the basis of international cooperation. This can perhaps be most clearly seen when one considers the tremendous possibilities of future progress in submarine telephone cable networks, space exploration and communications, air and marine traffic control, meteorology and medical electronics. But cooperation and exchange of experience in the rapidly growing markets of industrial and business electronics are equally important and are of more immediate practical concern from the trade point of view.

What then is the present pattern of electronics trade between the United Kingdom and the U.S.A. and on what basis should it be expanded? First some facts about the structure of the electronics industry in Britain. Annual production (including telegraph and telephone apparatus) is estimated at over $1.7 billion a year. Although statistics are difficult to compare on an international scale, this makes Britain the second largest producer of electronics in the world and among the largest exporters. Over 80% of the exports are in the capital goods category. Total employment in the industry is in the region of 300,000 people and the amount currently being spent on electronics research and development is over $168 million a year.

Including components and special materials, the number of products in Britain coming under the broad heading of electronics is today well over 3,000. The production of these products is spread over some 1,700 companies. These include about 450 producers of electronics equipment and well over 200 specialist manufacturers of radio and electronic components and accessories.

Consolidation of interests

In both the radio and television and the capital-equipment sections of the industry there has in recent years been a marked consolidation of interest. Thus today over 80% of the total production of electronic capital equipment is accounted for by less than 30 companies or groups. All of these are members of the electronic Engineering Association.

On the radio and television side about

90% of total production is shared by 6 large groups.

But the influence of the smaller companies is also well-marked, and together they have an exceedingly good export record. This is particularly true in the fields of communications and electronic measuring instruments and specialized components. There are today in Britain over 60 individual electronic measuring instruments being produced by some 90 companies. Exports of these instruments from many companies exceeds 60% of their total production.

Close links with U.S.

In terms of size and the number of people employed on electronics research, development and production, the major companies and groups in the broadly-based capital electronic/communications/control industry in Britain are as follows: The Plessey Company; Standard Telephones and Cables; English Electric; Marconi Company Limited; Electric and Musical Industries; Mullard; Elliott-Automation; Pye of Cambridge; International Computers and Tabulators; Associated Electrical Industries; General Electric Company; Ferranti; S. Smith and Son; Decca; Rank Organisation; Rediffusion and IBM United Kingdom Limited. All these companies have subsidiaries in the U.S.A. or close associations with American compaines. Similar link-ups are also to be found among a large number of the medium- and smaller-sized companies so that British Electronic representation in the U.S.A. is already substantial. But it could be considerably expanded.

The following are among the more prominent link-ups between British and American electronic firms that have been announced during the past 6 months.

- A new company, General Precision Decca Systems Incorporated, jointly formed in May by the Decca Navigator Company Limited, London, and General Precision Equipment Corporation, New York, will be licensed under all patents and related know-how of Decca Navigator. It will engage in the design, production and marketing of electronic navigation equipment for aerospace applications and military marine requirements.
- A new company EMI-US Limited has been formed by EMI Electronics Limited, London, and Hughes Aircraft, California, for the development and marketing of defense equipment. Racal Electronics Limited, who have been highly successful in the marketing of highgrade communications equipment in the U.S. are forming a North American subsidiary to manufacture in the U.S. and Canada.
- A joint company AGA-Derritron Incorporated has been formed by the Derritron Electronics Group and Aero Geo Astro Corporation to exploit the wide experience of Derritron Electronic Vibrators Limited in the enviromental science field.
- A new company, Cinerama-Telcan has been formed between Nottingham Electronic Valve Company (NEV) and Cinerama to market the new low-cost, home TV tape recorder. Interest for manufacturing and marketing rights has also come from Philco Ford.
- American electronic representation in the United Kingdom is also on the increase. Apart from STC (wholly owned by ITT) and IBM, the more prominent companies with operating plants and/or marketing organizations in Britain include Honeywell Controls; Sperry Gyroscope; Texas Instruments; Schlumberger; Raytheon; Electronic Capital Corporation; Hughes Aircraft; Ampex; Hewlett Packard; General Precision; Benson Lehner; Beckmann Instruments; Litton Industries; Fairchild; Dynamics Corporation; Perkin-Elmer, and Electronic Associates. There are also, of course, a large number of companies who have licensing and marketing agreements with British companies.

A two-way process

It is apparent then that the real extent of electronic trade between Britain and the U.S. is not to be found in the export/import figures but rather in the growing number of partnerships, subsidiaries and associate companies and in the expansion of cross-licensing and marketing agreements. This is very much a two-way process.

Total exports of British electronic and allied products in 1963 amounted to $439.6 million. Geographical distribution figures are readily available for only about 50% of the product categories listed by the Board of Trade, customs and excise. These, however, are sufficient to indicate that in 1963 Britain's best customer for electronic and allied products was the commonwealth (38%) followed by the European common market countries (13%); EFTA (European Free Trade Association) plus Finland (13%) and South Africa (9½%) only about 4% of the exports—worth about ($16.8 million)—went to the U.S.A.

The significant point is, however, that this ($16.8 million) figure is accounted for by a fairly distinct range of highly sophisticated electronic products many of which have no counterparts in the U.S. Others supplement or complement the vast range of products produced by the American electronics industry itself. Similarly, U.S. electronic exports to Britain are largely of a kind which fill a vital gap in the extensive range of products available from the British industry. A high proportion stem direct from the much greater research and development resources in the U.S. backed by government defense expenditure.

"ON-LINE CONTROLS": A tin plate production line at Steel Company of Wales Velindre Works is operated when information is fed into an Elliott ARCH computing system, controlling quality and analysis.

A high proportion of British electronic exports to the U.S. include those which reflect the traditional British attitude to, and aptitude for, fundamental research and the desire to obtain a high standard of technical performance. The most successful export achievements are to be found among the following products: high-grade amplifiers, loudspeakers and other sound reproduction equipment and parts; radar equipment, high-grade communications equipment, TV camera channels; photomultiplier tubes; radiation detection devices; microwave tubes; nucleonic instruments; medical electronic equipment, sophisticated computer equipment and logic circuits and electronic measuring instruments of all kinds. A few recent technical achievements of the British industry, as they effect anglo-American trade in electronics, include the following:

Recent technical achievements

● During 1963 some 200 orders for the Marconi 4½-inch image orthicon Mark 4 TV camera included 44 for the Columbia Broadcasting System and 30 for the U.S. Navy. The total number of these extremely sensitive and stable TV camera channels in use throughout the world is over 1,200.

● For their new transistorized marine radar, Decca Radar Limited has already achieved world sales of over 1,000. In all, Decca Radar has sold over 15,000 marine radars for merchant vessels and Decca radars are also in use in the navies of 42 countries. They are almost standard equipment in the U.S.A.

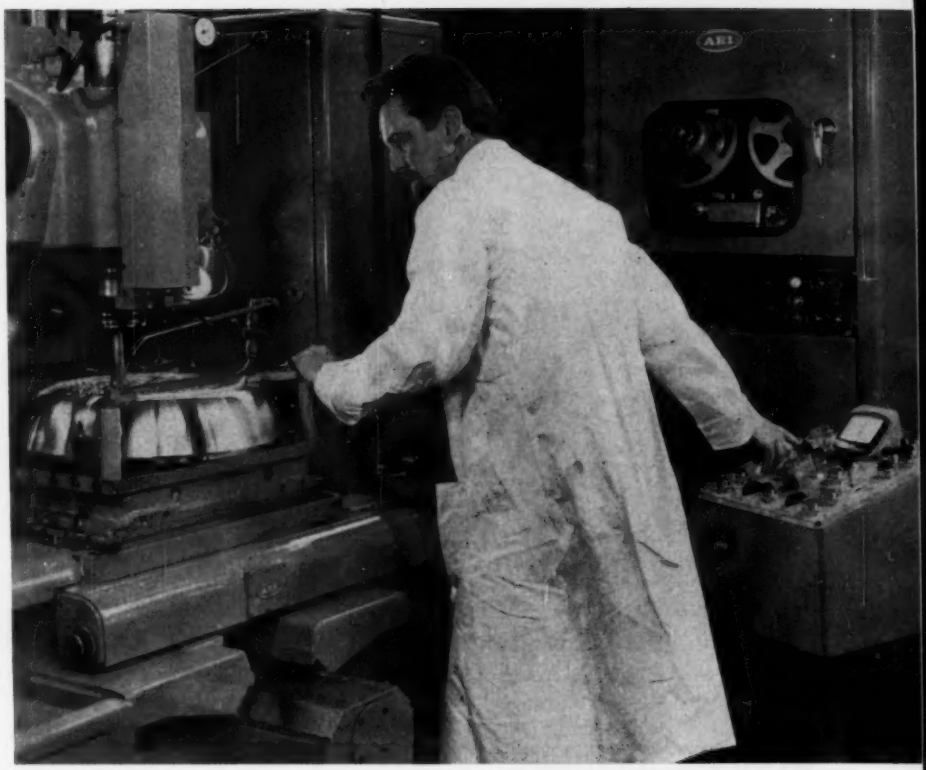
● In experiments to redetermine the ratio of the magnetic moment of the proton and electron using an atomic hydrogen maser, the Physics Department of Harvard University are using a custom-built proton resonance magnet designed and built by the Special Magnets Division of Mullard Limited.

● Pilot production of an ultrasonic "torch" as a guidance aid for the blind is in hand at Ultra Electronics. Of the 75 present orders for evaluation, 24 have come from the U.S.A.

● The possibility of very much faster, smaller and perhaps less expensive computers are being opened up by Elliott-Automation's recent work on tunnel diode circuits for ultra-high-speed switching.

● ICT are well advanced in the development, jointly with the Hirst Research Centre of GEC, of a 4,000-word, one microsecond magnetic film store.

● EMI Electronics are developing a miniature vidicon tube of ½-inch diameter. They are also increasing their range of super-sensitive photomultipliers to include tubes with very high photosensitivity in the red region of the spectrum. In the higher frequency and power ranges, attempts are being made to extend the upper frequency limit of plug-in reflex klystrons from 40,000 to 80,000 megacycles.



COMPUTER CONTROLS JIG BORER: A Newall Contimatic jig borer (left) under the control of a British "Plan-E-Trol" system will drill to a positional accuracy of + 0.0002 inches, according to the maker.

● Production plans have been laid down by the Marconi Company for the production on a commercial basis of integrated circuit computers.

● An advanced type of data processing system, the KDF9 is in quantity production at English Electric-Leo Computers Limited. Per unit of cost, the KDF9 claims to offer the fastest computation in the world.

● The increasing demand for electronic industrial measurement in the United States is being met by the links forged between Ferranti and Sheffield Corporation of America.

● At ICT work is well in hand on the Atlas 2 computer system. The $9.8 million Atlas developed by Ferranti in collaboration with the University of Manchester, is the largest computer system in the world. The Ferranti Computer Department was sold to ICT in 1963.

● Mullard has succeeded in extending the range of travelling wave tubes beyond 40,000 megacycles. Mullard is today among the world's main producers of travelling wave tubes for communication purposes. They are used in the Montreal-Vancouver microwave link and in the earlier multichannel link spanning the U.S.A.

These developments are representative of the extensive range of electronics work that is currently being undertaken in Britain. Other fields in which Britain is making a major contribution include blind landing systems, radio-astronomy and air traffic control systems. Work on a multimillion dollar national ATC network is already under way. Experience gained on these and many other developments of this kind should lead to still further trade links between Britain and the U.S.A.

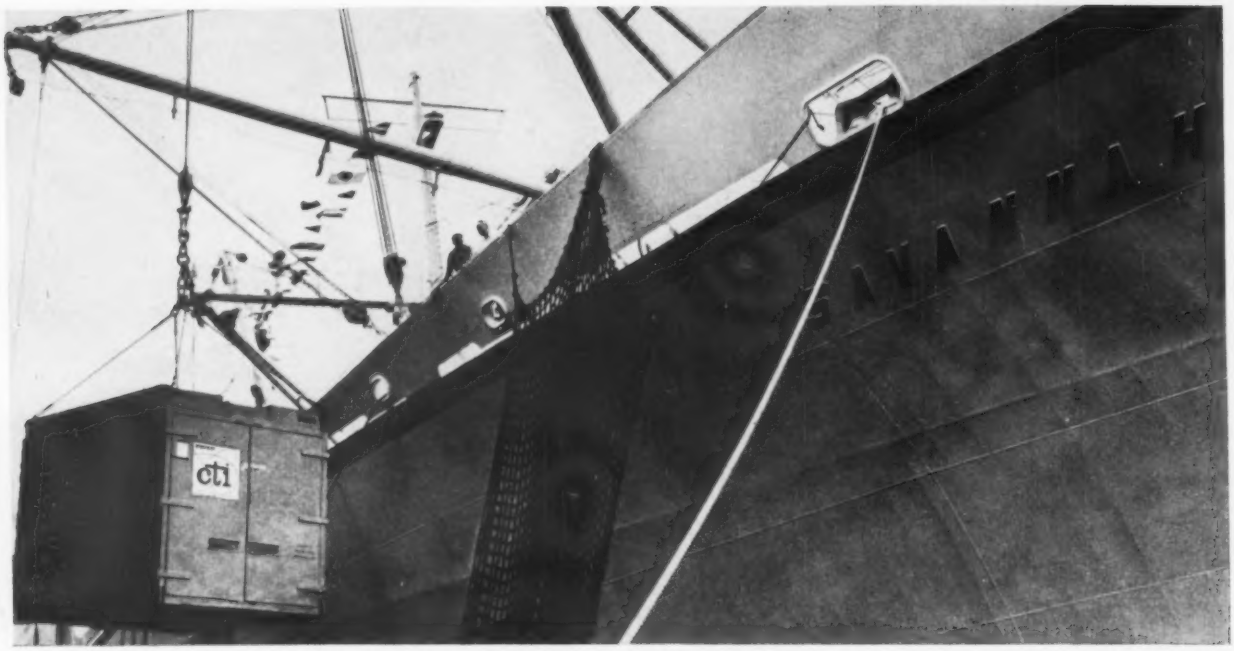
Information on the capital goods sector of the U.K. electronics industry can be obtained from the Electronic Engineering Association, 11 Green Street, London W.1., England.

OVER THERE

The U.S. Department of Commerce since 1954 has sent 125 Trade Missions abroad to foster the foreign trade of the U.S. These missions have visited 77 countries and returned with thousands of trade and investment opportunities for the American business community.

NEWCOMERS

One hundred and ninety-nine U.S. companies made sales in a new overseas market through the U.S. Trade Center program in 1963. Approximately 1,470 U.S. firms have participated in the Trade Center shows sponsored by the Department of Commerce.



SWINGING ABOARD: Shipment of medical and surgical supplies is loaded aboard the nuclear-powered merchant ship, Savannah, for a trans-Atlantic voyage.

Archaic shipping techniques devour exporter's profit

'Integrated transportation' should start at the factory, executive says

Gone is the day when the manufacturer can get his product to market by calling the nearest trucker with directions to "ship it to Podunk."

Nevertheless, says Jerome Slater of New York, some U.S. exporters still operate that way—and they're "throwing profit into the ocean."

The vice president of Container Transport International told a recent meeting of the International Executives Association in New York that "archaic and wasteful" shipping techniques offset brilliant marketing strategy and deft advertising.

In many instances, he said, "only lower shipping costs will make American goods competitive in foreign markets. With the squeeze on profits growing ever tighter, the pressure for improved distribution and transportation is becoming ever heavier."

Slater outlined a concept of "integrated transportation" which "starts in the factory" and ends with the goods delivered abroad "in mint condition and at a competitive price."

He cited this possibility for starting at the factory:

"Changing the dimensions of a product by half an inch may not affect its utility or beauty, but size will almost certainly affect ease and cost of shipment.

"If the product or its carton can be made so that a given number will exactly fill a standard shipping container, shipping is simplified. But unless somebody thinks about this problem well in advance, the product may turn out to be a fraction of an inch too large for the standard container.

"That means a smaller number will be shipped and dunnage will have to be placed inside the container to prevent the contents from rattling around and breaking. Why pay to ship dunnage across oceans if you don't have to?"

Slater described the process of shipping equipment and supplies from the U.S. to an oil-pipeline construction project in the Sahara Desert. He said shipments include instruments from Raymond, Maine; plumbing supplies from Port Huron, Mich., and North Grosvenor Dale, Conn.; telephone switchboards from Rochester, N.Y.; soil pipe from Macungie, Pa.; truck engine parts from Springfield, O.; lightning arresters from Pittsburgh, Pa., and oil-well machinery from Houston, Texas.

California sets up world-trade desk in Mexican capital

State-financed agency also plans to open offices in Tokyo, Paris

California took a giant step into the field of world trade last spring and found the exercise so rewarding that she's ready for two more.

The state which lays claim to being "the leading export state in the nation" set up a California world trade office in Mexico City and is proceeding with plans for similar offices in Tokyo and Paris. She will be the only state with foreign outposts on three continents.

The action is part of the program of the San Francisco World Trade Center Authority, an agency the California Legislature authorizes and finances "to foster and develop domestic and international trade for the benefit of the entire State."

Bright prospects

In the words of the Authority's executive director, J. Monroe Sullivan, setting up trade offices in foreign countries

creates "one of the brightest prospects" for California's economy.

He said the object of the program is to "provide California exporters with current information about trade possibilities, assist in obtaining new outlets and maximize the potential of existing markets." The offices also will encourage tourism to California and foreign investments in the state, he said.

The Mexico City office opened in April in the Hotel Del Prado, just off one of the Mexican capital's most important thoroughfares, the Paseo de Reforma. It is under the direction of John T. Rimback, former assistant advertising and public relations manager for a Mexico City manufacturing firm.

Sullivan said the Tokyo office "probably will open in November" and the Paris office "about March, 1965."

Big customer

Department of Commerce reports show that the United States now supplies about 69% of Mexico's imports. Of this total, Sullivan said, 15% comes from California. He added that more than 5% of the state's labor force is engaged in producing for export.

Sullivan said one of the chief jobs of the Mexico City office is processing inquiries from Mexican firms wanting to buy California products.

"We ascertain what firms in California supply the particular commodity and tell them of the trade inquiry so they can follow up," he said. "In order to be as impartial as possible, we send the information to three firms.

"One of the things we are working on now is finding a supplier and contractor to build a milk-processing plant for evaporated milk, dry milk and other dairy products.

There's variety

"We've also had inquiries about gear for fishing boats, chemicals, fertilizers, registered dairy cows, paint and parts for private aircraft."

Sullivan said the office had received "excellent co-operation" from the Department of Commerce and from U.S. commercial officers in Mexican cities.

He said the trade-office program is the outgrowth of a suggestion by Adolph P. Schuman, chairman of the San Francisco World Trade Center Authority and a member of the National Export Expansion Council. Schuman is president of the Lilli Ann Corp., which manufacturers women's coats and suits and operates a plant in a subzone of the San Francisco Foreign-Trade Zone (INTERNATIONAL COMMERCE, June 15, 1964).

IN TRAINING—Miss Paulita Alcorta plays the part of an exporter's secretary, with directions from the teacher, Mrs. Delia Gonzalez, in Laredo classroom.

Secretaries learn to serve exporter

Senorita Secretary is going back to school, the better to help her boss export U.S. goods to Mexico.

She's enrolled in a 16-week course of advanced training for work in the export-import field, including the niceties of international letter-writing and telephoning.

The course, a program of the Department of Commerce's Area Redevelopment Administration, was set up in co-operation with export-import brokers on both sides of the Rio Grande at "Los dos Laredos"—Laredo, Texas, and Nuevo Laredo, Mexico.

Classes meet on the U.S. side of the border. Goal of the program is to overcome a shortage of bilingual secretaries trained in foreign trade.

The course, now just past mid-term, includes lessons in business English and Spanish; international postal and telephone regulations and procedures, and procedures for processing a variety of forms. Lecturers include U.S. and Mexican businessmen.

The students—there are 15 in the course now in progress—also visit business offices in Laredo and Nuevo Laredo for on-the-scene instruction.

U.S. exports to Mexico in the first quarter of 1964 were up 23% over the same period last year, for a total of $227.3 million.

Two firms, airline push sales, travel; given 'E' awards

One of the major hurdles a U.S. exporter faces in expanding sales abroad is getting customers to accept novel and labor saving devices.

At least the Preformed Line Products Co. of Cleveland, Ohio found this to be true. The company manufactures pole line hardware (supporting, reinforcing and gripping devices for electrical conductors, wires and cables).

The firm is gradually overcoming the problem, however, through references to successful use of its products in the United States and elsewhere; on-the-spot discussions and demonstrations; continued sales follow-up; and vigorous competitive bidding in worldwide public tenders.

On June 25 at a noon ceremony in the auditorium of the Cleveland Engineering and Scientific Center, the company received the President's "E-for-Export" award for its efforts to increase sales overseas.

Regional Export Expansion Council Chairman Robert W. Gresham presented the award to Jon R. Ruhlman, president.

Promotes travel

Two days later, Northwest Airlines, Inc., of Minneapolis received the award for its contribution to travel promotion from the Orient to the United States.

In 1960, the airline carried 11,956 passengers from Far East countries to the U.S. The figure has risen steadily each year and reached 24,889 last year.

Secretary of Agriculture Orville L. Freeman presented the award to Donald W. Nyrop, president, at a luncheon in Minneapolis.

1961 turning point

Algas Industries, a subsidiary of Union Oil Co., began to intensify its export activities—it manufactures equipment for liquid petroleum gas standby systems and internal combustion engine conversion—in 1961.

This was the result of the increasing availability of butanes and propane in foreign markets, particularly the Middle East and Africa.

Secretary of the Treasury Douglas Dillon presented the company with an "E" award July 7 at the Treasury Department in Washington, D.C. C. Haines Finnell, president, accepted.

50-nation group sets sights on global standards

Norms sought for small tools, vacuum technology, others

Worldwide standards for electrical and electronic equipment, mechanical vibration and shock, vacuum technology, and small tools are being drafted by working committees of the International Organization for Standardization (ISO), whose U.S. member is the American Standards Association.

Difficulties in technical work affected by patents are being sifted by a 5-nation working group (Great Britain, France, Germany, the Soviet Union and the United States) under British leadership. This group, set up at the 29th general meeting of the International Electrotechnical Commission (IEC), will present patent-policy recommendations to sessions scheduled for October 1965 in Tokyo. Other IEC committees are studying the reliability of active and passive electronic components and standards for electric appliances used in the home.

Fifty nations strong, the ISO met in June at Aix-les-Bains, France, and took the first step towards global standards for mechanical vibration and shock. Technical Committee 108 set up 7 working groups to draft international standards in related fields including excitation by sources such as machines and vibration and shock testing devices; elimination, reduction and control, especially by balancing, isolation and damping; evaluation of acceptable limits for man, and in machines, vehicles and structures; methods and means of measurement and calibration; and methods of testing and terminology.

Assignments

The United States assumed two secretariat duties—terminology, and vibration and shock isolators and dampers. France, Germany and Great Britain assumed others.

The newly authorized Technical Committee 112 will meet Sept. 29-Oct. 1, 1964, in London to formally launch global standards work for vacuum technology. Eight standards developed by the American Vacuum Society will be considered, along with others submitted by Great Britain. "Overwhelming support" for the global standards effort was manifested last year by U.S. industry at a general conference called by the American Standards Association.

In the field of small tools, 9 new global standards drafted by ISO's Technical Committee 29 have been presented for approval to the 50 member-nations. At the request of the Cemented Carbide Producers Association, U.S. industry is being polled through the American Standards Association to decide whether 5 American standards for carbide blanks will be submitted to the international committee for consideration as global standards.

Field offices No. 41, No. 42 operating in Iowa, Maryland

The country's 41st and 42nd "small-scale Departments of Commerce" have just been opened in Des Moines, Ia., and Baltimore, Md.

Basic purpose of the new field offices in those cities, as explained by Secretary of Commerce Luther H. Hodges, is "to disseminate business information and provide consultative and advisory services" to Iowa and Maryland business firms and organizations. In each State, the Secretary continued, "major emphasis and effort" will be given to export expansion, boosting the economy by helping Iowa and Maryland firms increase sales of their products in foreign countries.

Before the new field offices were opened, Iowa's business community received services provided by Commerce Department field offices in Chicago and Kansas City, Mo., while Maryland firms were served by field offices in Philadelphia and Pittsburgh.

The acting director of the Des Moines field office is William H. Curran, assistant to the director of the St. Louis field office. The acting director of the Baltimore field office is Henry J. Dempsey, assistant to the director of the Philadelphia field office.

The Des Moines office is located in Room 1216, Paramount Building, 509 Grand Avenue (Telephone 284-4222). The Baltimore office is in Room 305, U.S. Customshouse, Gay and Lombard Streets (Telephone PLaza 2-8460, ext. 2784).

A complete list of the 42 U.S. Department of Commerce field offices appears on the inside back cover.

Investment Opportunities

(*See also pages 39-42*)

EQUIPMENT SOUGHT

Manufacturer of metal structural equipment seeks U.S. licensing rights on silos for the storage of grains and pulverized products, and material handling equipment used in agriculture.

Write: Etudes et Travaux de Constructions Metalliques, 9 Impasse des Petits-Marais, Gennevilliers (Seine), France.

MOULDED PRODUCTS

Swedish manufacturer of moulded plastic articles seeks license to make moulded products of thermosetting and thermoplastic materials, the latter weighing up to 88 oz.

Write: Industri AB Broderna Larsson, Gotene, Sweden.

INDUSTRIAL PAINTS SOUGHT

Seeks license to manufacture industrial paints for all purposes. Write: Chemical Utilities, (Pty), Ltd., P.O. box 52, Alberton, Transvaal, South Africa.

LICENSING AGREEMENT

Manufacturer of textile machinery, machine tools, and packaging machines, wishes to establish a technical licensing agreement with U.S. manufacturers for the production of construction equipment and automatic packaging machinery.

Write: O-M Spinning Machines Mfg. Co., Umeda Bldg., 7 Umeda, Kita-ku, Osaka, Japan.

U.S. PRODUCTS WANTED

Medium-sized company engaged in the manufacture of metal work for the shipbuilding and construction industry, is interested in licensing rights for the following U.S. products:

Valves, gages, testing equipment, welding equipment, hydraulic equipment, light machinery, sheet metal products, construction work up to a total weight of 10 tons per unit.

Write: Machinefabriek & Handelmaatschappij "WINEL", N.V., P.O. box 70, Assen, Netherlands.

MAIL ORDER PARTICIPATION

Sole proprietorship in Germany offers interested parties in U.S. the possibility of participating in planned expansion of its mail order business. Minimum investment would be $125,000. Write: Fritz Linse, 18 Grohner Strasse, Bremen, Germany.

Confident Venezuela roars ahead; exchange reform goes smoothly

Investors promised just treatment and necessary guarantees; peaceful elections generate strong optimism among businessmen

During the first quarter there were clear signs that the continuous Venezuelan upswing which began in late 1962 is picking up even stronger momentum. The peaceful elections of December 1, despite terrorist threats, and the election results themselves, which indicated that there would be no disturbing policy changes were important factors involved in generating a strong feeling of optimism.

The feeling expanded to one of marked confidence by the time the new administration took over on March 11 despite the unexpected failure of the two major parties (AD and COPEL) to form a coalition.

Business generally was excellent. There was increased activity in the Caracas real estate market. Construction reached the highest level since the boom of the late '50s. Unemployment was reduced somewhat, but was still estimated at over 10% of the labor force. Prices of securities, particularly some of the blue chips, increased considerably. New investment plans moved forward without interruption.

There were no serious problems in adjusting to the exchange reform of January 18 which brought almost complete rate unification.

Sharply increased liquidity in the banking system caused concern over the maintenance of internal price stability.

President Leoni gave assurances that the existing policies would be continued and pressed vigorously by a "government of action." He promised increased emphasis on low-cost housing and agrarian reform and social security coverage would be increased. The State is pledged not to interfere or compete with private enterprise except in those fields reserved for exclusive State operation (petrochemical plant, steel plant, gas distribution).

Foreign investment, which contributes to the expansion of national production within the orientation indicated by the government, has been promised just treatment and necessary guarantees.

On petroleum, President Leoni referred to the "irrevocably discontinued" concession system and said that the development of assignments by the Government-owned Corporacion Venezolana del Petroleo would be accelerated. Private investment in petroleum and minerals will retain all rights previously granted and can participate in future development within the framework of new exploitation conditions established by the State.

The administration is developing a plan for an expanded and accelerated public works program financed by the increased revenues resulting from the exchange reform.

Business confidence continued at a high level. Reports from eastern Venezuela indicate a marked upturn in business activity. Western Venezuela, however, which had been showing signs of emerging from a long depressed period, suffered a serious blow in early April when a tanker went out of control and collided with the Maracaibo bridge, causing the collapse of a 700-foot section. Although reconstruction is being rushed it will take several months to restore the bridge.

Despite payment of more than $50 million on foreign debts in January, there was a surplus of $12 million in official foreign exchange transactions for the first quarter. Venezuela is continuing to accumulate a significant foreign exchange surplus and the improvement in Venezuela's balance of payments during the past 2 years is continuing. Official foreign exchange reserves on March 31 (the low point in the quarterly cycle) were $752 million against $585 million on the same date last year.

Government budget

The increase in revenues resulting from the exchange reform has made it possible for Venezuela to increase public spending to approximately the level called for in the National Plan without imposing additional taxes.

Venezuela's public debt was reduced significantly in the first quarter. Internal debt (including estimated floating debt) fell moderately from 1,539 million bolivars ($498 million) to 1,526 million bolivars ($493.5 million). External debt declined from $198 million to $159 million, due especially to repayment of $33.3 million final installment on a 1960 commercial bank loan and a $15 million initial payment on a $75 million 1961 Eximbank loan.

Venezuela's public finance policies clearly have been altered from the austerity measures which prevailed beginning in 1960. Although there is no indication that the government will abandon its adherence to generally conservative and orthodox policies, the fiscal surpluses of the past 2 years cannot be expected to continue in the light of Venezuela's sharply improved fiscal situation. Pressures for increasing employment and stimulating economic development will be increased.

There was concern during the quarter over reports of price increases. Retail prices of many basic products were said to be rising. Some economists warned that the January exchange measures and increased government expenditures might start an inflationary spiral. However, the Central Bank wholesale price index for January fell from 117.2 in December to 116.8, as food prices declined.

Petroleum production for 1963 increased 1.48% over 1962, rising to 3,271 thousand barrels per day. The ratio between government revenues from the petroleum industry to the net profit of the industry again was 66/34. Industry net profits were 1,726 million bolivars ($558.6 million), which reportedly represents a return of 19.51% on an average capital in the industry of 8,845 million bolivars ($2,862.5 million).

The Venezuelan Government modified the bolivar exchange rate applicable to the petroleum industry on January 18. The new rate is 4.4 bolivars to the dollar, in place of the previous rate of 3.09 to the dollar. In addition to slightly increased revenues, the government also expects this modification in the exchange rate to result in a better integration of the petroleum industry into the national economy, an increase in local purchasing by the industry, and possible new investments in exploration and exploitation.

The Venezuelan Petroleum Corporation (Corporacion Venezolana del Petroleo-CVP) announced an agreement with the Compania Shell de Venezuela under which Shell would refine a total of 500,000 barrels of CVP production from its Lake Maracaibo holdings.

After a brief respite, sabotage activities were renewed in the Eastern Venezuelan petroleum fields during February, with the destruction of pipelines and collecting stations. Fortunately, the industry was able to repair effectively the damage and maintain normal operations.

The Superior Oil Company of Venezuela was purchased by Texaco Incorporated, and the local press reported the purchase price as being over 1.8 million common shares of Texaco Incorporated, valued at approximately $125 million.

Average daily production through

March 31 was 3.4 million barrels, an increase of 1.76% over the similar period in 1963.

Iron ore production for 1963 was 11.86 million metric tons, a drop of 10.6% from 1962. The average monthly production for the first quarter was 27.6% over the similar period of 1963. Industry sources are reported as having stated that total production for 1964 would be some 2 million metric tons greater than in 1963.

One of the principal iron mining companies has been negotiating with the Corporacion Venezolana de Guayana to install in Santo Tome an iron-ore treatment plant which would increase concentration of iron in the ore from 60% to 85%. This plant would use natural gas now being wasted in the oil fields of Eastern Venezuela. The plant would cost in the neighborhood of $40 million and have an original annual capacity of 1 million metric tons, which subsequently could be increased to 10 million metric tons.

The government is preparing to establish a Coordinating Commission for the Conservation and Marketing of Iron. This would be preliminary to the organization of an international group of iron-ore exporting countries similar to the Organization of Petroleum Exporting Countries.

Export sanctions imposed on New York company

A New York exporter and the firm which he controls have been denied U.S. export privileges for the duration of the Export Control Act for falsifying shipping documents covering export of electronic equipment from the U.S. to Vienna, Austria.

Benjamin Winkler, and his firm, the B. W. Trading Corporation, have been fined $6,000 on a guilty plea in criminal proceedings. They may seek restoration of export privileges under probation after 1 year.

Sanctions were imposed on 2 charges by the Bureau of International Commerce after an investigation.

The respondents are accused in 1 charge of exporting oscilloscopes valued at $3,600 by falsely representing the shipment as transistor radios. Oscilloscopes are on the U.S. positive list of commodities requiring individual export license.

The second charge involved an effort to ship $8,800 in oscilloscopes on falsified documents. This shipment was intercepted in Customs.

Under the order, all outstanding export licenses in which the defendants have an interest have been cancelled and they have been denied participation either directly or indirectly in export operations from the U.S., covering commodities or technical data.

The restrictions also apply to any parties doing business with them.

WHERE THEY'RE EXHIBITING

During 1964, U.S. products will be displayed in Commerce Department commercial exhibitions at international trade fairs in the Netherlands, Japan, France, West Germany, Spain, Switzerland, Israel, Italy, Austria, Finland, and Sweden.

Diversification sought by Venezuelan chief

By Neil C. Hurley, Jr.

Chairman, National Export Expansion Council

CARACAS, VENEZUELA—There are 5 telephones on the desk, none of which rang during the hour. The office is small enough to be used by a U.S. cabinet member, with gold drapes, valances and a gold-tinted ceiling, offset by thick grey carpeting.

This is the third floor working office of President Raul Leoni at the Venezuelan palace. His desk is massive and elegant, like a small Cunard liner; a few letters in the center and a neat pile of the morning newspapers to the left. Bookcases are recessed in wood-paneled walls.

President Leoni, sitting beneath life-size murals of Venezuelan revolutionary heros, speaks quickly and replies easily to questions, usually with no change of expression, almost as a man waiting for novocaine to wear off.

"We are studying the Latin American Free Trade association," he says. "We hope it works out, but there are changing discussions. I could not predict where it will develop. This is a big area of the world with many problems."

Secretary of Commerce Luther Hodges, whom Leoni was entertaining this recent day, pointed out Venezuela exported 8 times more than the United States, when sales are compared to gross national product. "Unfortunately," replied Leoni, "we have only oil as a basic industry."

Hodges, a non-smoker, handed him a package of L & M cigarettes. "North Carolina has the same problem. Smoke these and help out my state." The President laughed and took the cigarettes.

The Secretary reiterated his theme of two-way trade, two-way investment and two-way travel. "We come here," Hodges said, "to talk in hopes our nations will grow together in commerce; to assure you we wish to acquire more of your products than oil; and to hope that you, too, will want to assist in our attempts to become greater suppliers to your people when we favorably compete."

Raul Leoni, after the overthrow of the Democratic Action Party in 1948 spent 10 years in exile in various parts of Latin America, returning to Venezuela in 1958. He now governs this country of over 8 million people who live in an area about one-and-a-third times the size of Texas. Venezuelan citizens have the highest per capita income in Latin America, but it is unevenly divided.

Venezuela buys more than half her imports from the United States and is this country's third best customer in South America and tenth best customer in the world.

President Leoni, a round man, wears glasses with jet-black rims, more prominent because the lenses are mildly colored with a soft, dark tint. One reaches him in this office by walking the stairs of this shining building, glistening as though cleaned with hexachlorophene, until finally walking through a 15-foot gold door.

Hodges was explaining all other lands in the world felt the United States had no problems, since it was rich, affluent and powerful. Leoni listened attentively, then declared Venezuela shared U.S. views and was squarely with this nation.

Steady increase in U.K. demand for bakery machinery, equipment good news for U.S. merchants

Housewives, rising number of supermarkets major factors in market development; Trade Center show set in November

Interested in selling bakery machinery and related equipment? Try the United Kingdom.

The British housewife is interested more and more in "convenience" foods instead of unprepared foods traditionally found on the market.

And the enlargement of trading areas in the British Isles since World War II has paved the way for more supermarket and self-service chain store operations.

These two factors are the stimulating forces behind the steady development of the U.K.'s food processing industry in general and bakery processing equipment in particular.

In second place

The United Kingdom as a market for U.S. bakery machinery and related equipment advanced from seventh to second place in the 1959-62 period.

Its overall demand for food preparation and packaging equipment has expanded 40% in the past five years, according to a recent survey by a marketing research firm under contract to the U.S. government.

The survey was carried out in connection with a bakery processing equipment show scheduled Nov. 3-13, 1964. The show offers a good chance for U.S. suppliers of the following products to display and sell their wares:

Most types of bakery processing equipment including those used to prepare biscuits, bread, cakes, donuts, muffins, pastries, pies, pizzas, quick-frozen products, rolls, scones, jam tarts and wafers.

This will involve devices used for mixing, dividing and rounding, moulding, baking and wrapping bakery goods.

Not recommended

Aluminum foil baking containers, baskets, cabinets, pans, racks, shelves, sinks and tables are not recommended for display at the Trade Center because they are not usually competitive items.

The U.S. merchant has two distinct target groups to aim for in the U.K. market for bakery processing equipment—the growing number of large-scale bakery products processors requiring complete plant systems, and the 15,000 neighborhood bakers and other establishments for small to medium-size bakery processing equipment.

Illustrations encouraged

For this reason prospective exhibitors at the Trade Center show are encouraged to show movies, models, photo murals and/or drawings to illustrate the use of their equipment when it is not possible to display machinery or equipment because of size and weight characteristics.

The balance struck between equipment displayed and that illustrated will depend on participating firms. The 2,800-3,000 square feet of exhibit space available at the Center will allow between 15 and 20 exhibitors to display and demonstrate their equipment.

Items exhibited may not exceed 100 lbs. per square inch.

The U.K. population, now about 54 million, is expected to increase at an average anual rate of 400,000 in the 1964-68 period.

Buying more food

With this growth in the number of consumers, money spent on food is expected to rise from $14.7 billion to $18.6 billion, or 27% in this period.

To keep pace with the demands of the expanding population and to take advantage of higher consumer income levels, the U.K. industry has embarked on a program to improve and centralize manufacturing and distributing operations.

More advanced machinery and equipment are in demand and a definite shift away from small independent businesses to larger, corporate enterprises is in progress.

Japanese laundry operators pleased with U.S. products

Tokyo Trade Center features highly advanced equipment

What was the reaction of Japanese visitors to the laundry and dry cleaning equipment show at the U.S. Trade Center in Tokyo?

One U.S. exhibitor at the May 26-June 12 show put it this way:

They "quickly saw the advantages of our equipment. All that remained was for us to tell them how soon the machines would pay themselves off. I guess they didn't need much persuading. We had some pretty special machines at the show."

This comment adequately sums up the show, the first major exhibition in Japan of some of the most advanced products of the U.S. laundry and dry cleaning equipment industry. Thirty-three U.S. firms exhibited.

Nearly 3,000 visitors came from every part of the nation—some even from faraway Okinawa—and almost without exception they left impressed and satisfied.

For 14 days, American exhibitor met Japanese business visitor at the Trade Center. On the traditional exchange of business cards, many Japanese laundry operators found it difficult to hide their pleasure at discovering they were addressing the president or vice president of the exhibiting U.S. firm.

Business deals were quickly reached on products from flatwork ironers to coin-operated, automatic dry cleaning machines.

Favorable comments and constructive advice came from visitor and exhibitor alike.

'Move with the times'

"The exhibition has been very instructive," said T. Yamaguchi, managing director of the Shizuoka Cleaning Association. "We realize that we have to move with the times. We need new machines now to keep up with the competition. We also have a manpower shortage.

"I'm very glad to have had this chance to see these very highly advanced American machines. I hope this type of Show will be repeated periodically," he said.

Iwao Oguro, one of a group of 33

laundry operators from Hokkaido who toured the Show on June 8, said he was particularly impressed with a new dry cleaning device called a vacuum spotting board and also an automatic pants-pressing unit called the "Pant-A-Matic." "These are the first machines of their kind that I have ever seen," he remarked.

Koichi Akamine, president of the "Super Laundry" plant on Okinawa, said he had received an invitation to the Trade Center Show just as he was planning a business trip to Japan.

"The technological advances incorporated in the machines on display here are really fantastic," Akamine declared. "I must say that some of the equipment was far from cheap. But I've found a marking machine, in which I was especially interested, that was priced quite reasonably."

Another visitor, I. Yamazaki, a laundry and dry cleaning operator in Ibaragi Prefecture, bordering Tokyo, gave some constructive advice.

"Some of the equipment on display here needs modification because of physical differences between the stature of Japanese and Americans," he observed. "For example, pants toppers designed for American waistlines are unlikely to be suitable for use in Japan."

"This is one of the things we've learned from first-hand observation here," said Fred D. Butler, Jr., director of market research and distribution of the Speed Queen division of McGraw-Edison Co., Ripon, Wis.

"We've found that if we wish to sell to the Japanese we have to adjust our thinking for this very important market. We have to think in terms of centimeters and meters instead of inches and feet.

"We have to consider Japanese electrical systems, the limited floor space of the average Japanese laundry shop, the types of detergents that are available locally, and countless other factors. In short, we have now learned that we have to adapt our equipment for specific Japanese requirements.

'Invaluable experience'

"This Tokyo Trade Center Show has been an invaluable experience for us," Butler added. "It's given us an opportunity to explore the Japanese market, and from what I have seen so far, this is going to be a very, very important area for us.

"This Show has given us a foothold here. It's now up to us to make the best we can of it."

John K. Clement, president of the Bock Laundry Machine Co., Toledo, Ohio, told visitors to his booth:

"We look forward to developing a good market here. I am personally delighted with our participation in this Show."

Opening day visitors to the June 22-27 electronics show at the Trade Center in Frankfurt saw quite a number of computers and computer systems. The top photo shows the booth of Remington Rand where a Univac 1004 computer is shown in operation, while the front left section shows part of the IBM display emphasizing the new 360 system available for delivery around the end of this year. Below, left, several technical students examine the hardware interior of a Univac 1004 system. At right, German businessmen look over a National Cash Register Card Random Access Memory CRAM.

Advanced medical supplies, equipment to be displayed at Milan Trade Center

Show set Sept. 9-16; sales potential appears favorable for U.S. suppliers but only through aggressive effort

"How soon can we go to Milan?"

This question was asked recently by several U.S. medical equipment firms who previously had exhibited their products at the London and Tokyo Trade Centers.

"Sept. 9-16," replied the Milan Trade Center. At least 15 U.S. firms have made verbal commitments to go.

Sales potential for U.S. medical supplies and equipment appears especially favorable, according to a market survey. U.S. products enjoy a widespread reputation for quality and advanced technology.

> Additional details about shows scheduled for U.S. Trade Centers overseas is available from the Bureau of International Commerce, Office of International Trade Promotion, Department of Commerce, Washington, D.C. 20230.

The electromedical and therapy fields reportedly offer the best opportunities for future sales growth but no medical product should be overlooked, except for standard X-ray equipment.

Theme of the show is advanced medical equipment. All types of medical instruments, supplies and equipment are included, but each item should be new to the Italian market and possess novelty in design and function not available from European sources.

Categories specifically recommended, in addition to the two mentioned above, are nuclear medical instruments, advanced medical research and laboratory equipment; low-priced mass-produced disposable hospital equipment.

Sales of U.S. medical equipment to Italy have more than doubled since 1961 and totaled an estimated $1 million in 1963. Related U.S. research instruments added another $1.3 million last year.

Not enough beds

Italy has an estimated 420,000 hospital beds for its 51 million people. Most of the hospitals are municipal, and all of them have a shortage of beds. Many of them are inadequately equipped by modern standards.

Several government-supported hospital modernization and construction program are underway. Medical research has been accelerated by recent government funds, and expansion of all related research can be expected to continue.

U.S. firms interested in entering this market face two obstacles, however—exposure to market and price competition from other foreign suppliers. Both can be overcome by aggressive effort, the market survey reported.

The Trade Center provides the first good opportunity to exhibit and demonstrate U.S. medical products in Italy for there are no other medical trade shows there. Thus far, new American equipment has rarely been shown in Italy.

Electronic components fair to take place in Munich

More than 60 American electronic firms, many of whom were first introduced to the European market at the U.S. Trade Center in Frankfurt, have signed up for Electronica, scheduled for Munich Oct. 21-28.

The event is said to be the first electronic components trade fair ever held in Germany. It will feature several technical symposia and a panel discussion on "Component and System Reliability."

Write: Gerald G. Kallman, 9 Journal Square, Jersey City, N.J., U.S. representative for the trade fair.

Steel-making industry show set this fall in Cleveland

An international exposition of equipment and processes for the iron and steelmaking industry will be held in Cleveland, Sept. 21-24.

Approximately 200 exhibitors from the United States and abroad will present their most advanced equipment for efficient production or maintenance. More than 15,000 visitors from the steelmaking and related industries are expected to attend.

Write: Exposition Manager, Association of Iron and Steel Engineers, 1010 Empire Building, Pittsburgh, Pa. 15222. Advance programs are also available from this address.

U.S. firms invited to MACHEVO Fair in Utrecht in '65

Processing equipment, machinery, related devices to be featured

Processing equipment, machinery, processing instrumentation, laboratory apparatus and related devices will be featured at the 6th MACHEVO Fair, to be held Oct. 13-20, 1965, at Utrecht, the Netherlands.

This exposition serves the chemical, pharmaceutical, food, beverage, tobacco and dairy industries throughout the country and nearby areas.

> Additional information on international trade fairs is available, unless indicated otherwise, from the Bureau of International Commerce, Office of International Trade Promotion, Department of Commerce, Washington, D.C. 20230.

U.S. manufacturers are invited to participate in the show. Expanded display space will be provided at the Croeselaan Fairgrounds in Utrecht.

The Comité des Constructeurs Europeens de Materiel Alimentaire (COCEMA), the European Committee of Food Material Manufacturers, has selected this fair to be the international exhibition for equipment, instruments and apparatus related to the European chemical, beverage and food processing industries.

At the last MACHEVO Fair, in 1962, more than 1,000 firms from 25 countries participated. Nearly 100 American manufacturers were present. Visitors and buyers came from every country in Europe and from other parts of the world.

Write: J. E. van Putten, Foreign Department, Royal Netherlands Industries Fair, Vredenburg, Utrecht, the Netherlands.

AUTO SHOW

An automobile show will be held in Abidjan, Ivory Coast Nov. 28-Dec. 6. U.S. automobile manufacturers are urged to display cars at the show. The event will be held in the Hotel Ivoire, Abidjan's new luxury hotel.

Heavy buying spree produces record El Salvadoran imports

U.S. trade share exceeds that of 4 leading competitors; non-coffee exports reflect economic diversification drive

The late 1963 heavy buying trend in El Salvador has carried over with full force into the first quarter of 1964. Sales were up 15% over the same 1963 period, according to estimates of individual businessmen.

Salvadoran Government trade statistics for 1963 show exports at $153.6 million, while imports reached a record high of $150.8 million, up $26 million from the 1962 record of $124.8 million.

The U.S. furnished 34% of these imports and took 24% of the exports, thus exceeding the combined market share of the next 4 countries, Holland, Germany, Great Britain and Japan, for 1963. Imports reached a new quarterly high of $38 million in first quarter 1964, which may portend a record year. Exports amounted to $55 million, comparable to the first quarter of 1963.

Coffee dominates

Coffee continued to dominate the export picture, but diversification attempts were reflected in increased exports of cotton and "other products." Coffee production resulted in surpluses well above the country's original coffee export quota for the year under the International Coffee Agreement, and the Salvadoran quota was subsequently upped by 200,000 bags for the 1963-64 crop year.

Cotton production reached a new high of about 325,000 bales, even though yields were down because of increased use of marginal lands and unseasonable November rains. Sugar acreage also increased, and producers expect a 50,000-ton exportable surplus this crop year. Sugar is part of the "other products" category which showed an increase of $10 million for the period, or 20% above the same period of 1963.

Net foreign exchange reached a new high of $67 million in May. Increased production and exports should cause it to grow even more during the year. However, larger expenditures for imports, especially of raw materials and capital goods for economic expansion, are expected to offset these greater earnings.

Money supply

Reflecting the continued high level of business activity and following the usual seasonal trend, the money supply at the end of the first quarter showed an increase of 10% over the same quarter of 1963. Loan funds are readily available on a short-term basis, but long-term developmental loans remain scarce despite a pressing need for them.

El Salvador ran a $2 million deficit in 1963 due to lower revenues than anticipated from internal taxes, and export and import duties. The 1964 Budget Estimate calls for a balanced budget of $89.7 million, approximately 16% higher than the 1963 figure.

Government encouragement of industrialization resulted in the approval of 33 applications for benefits under the Industrial Development Law in January and February. Thirteen of these were in the field of chemicals and related products. INSAFI, El Salvador's industrial development agency, granted 32 loans amounting to $300,000, and expects the figure to increase sharply over the remainder of the year as the $4.5 million AID industrial development loan is used.

Several manufacturing plants are nearing completion and entering production. A $5 million chemical fertilizer plant complex, Fertica, S.A. at Acajutla, consists of 3 separate plants making sulfuric acid, super-phosphates and complete fertilizers.

Phelps-Dodge Corporation is constructing a $2 million copper wire and cable plant on the outskirts of San Salvador, and Phillips, a European firm, is putting up a light bulb factory in the same vicinity.

The Aluminum Corporation of America has purchased a local firm producing aluminum extrusions, apparently with the thought of expanding production to supply the entire Central American Common Market.

Representatives of the five Central American countries, plus Panama, approved a constitution for a Central American Telecommunications Corporation. The regional organization would be responsible for the installation, operation and maintenance of a series of microwave telecommunication stations connecting David, Panama, with Puerto Madero, Mexico, via the Central American capital cities.

The Instituto de Colonizacion Rural (ICR) initiated its ambitious land reform plan by starting to break up its "haciendas." Participating farmers will pay for lots over a 20-year period and will be helped by Ministry of Agriculture extension services and by supervised credit from the Farmers' Welfare Administration (ABC).

JUST DESSERTS: A pastry vendor carries a basket of goodies to members of a construction crew at work at the site of the Guayabo hydroelectric plant in El Salvador. World Bank loan financed the project.

Political uncertainty brings caution to Southern Rhodesian businessmen

Offers some substantial sales opportunities for U.S. exports; several industries inaugurated despite uncertain outlook

Since the dissolution of the Federation of Rhodesia and Nyasaland on December 31, 1963, Southern Rhodesia has been a self-governing British territory.

No date has been set for independence and some political uncertainty has led to a cautious outlook by investors. Recent sales and industrial activity have been fairly stable, however, although costs are rising.

Economic indicators show that Southern Rhodesia will have a trade surplus in 1964. Total exports are expected to be about $336 million, and imports should not exceed $280 million.

Great Britain and the Republic of South Africa remain Southern Rhodesia's most important suppliers, and together generally account for more than 50% of imports.

Although the U.S. share of the market is much less than that of Southern Rhodesia's principal trading partners, some important sales opportunities exist for U.S. exporters.

It appears that the best opportunities for U.S. sales to Southern Rhodesia in 1964 will consist mainly of passenger cars and parts, tractors, industrial machinery and appliances, aircraft and aircraft parts, medical preparations, chemicals, plastics, clothing, and paper.

The whole commercial picture is now overshadowed in some measure by rising costs. Living costs in Southern Rhodesia have increased by about 5% since the beginning of 1962. The trend has recently accelerated due to advances in utility rates, increases in the sales tax, and mounting freight charges.

Despite a generally cautious investment attitude, some new industries have been inaugurated this year. These include a $42,000 fish freezing installation on the shores of Lake Kariba, and a $168,000 steel foundry in Salisbury. A new $1.4 million brewery is being constructed in Bulawayo and should be in operation by the end of the year. Rhodesia Sugar Refineries Ltd. is expanding its Salisbury refinery to increase output by 50%, and a new $8.4 million sugar factory has been started in the lowveld by Hippo Valley Estates.

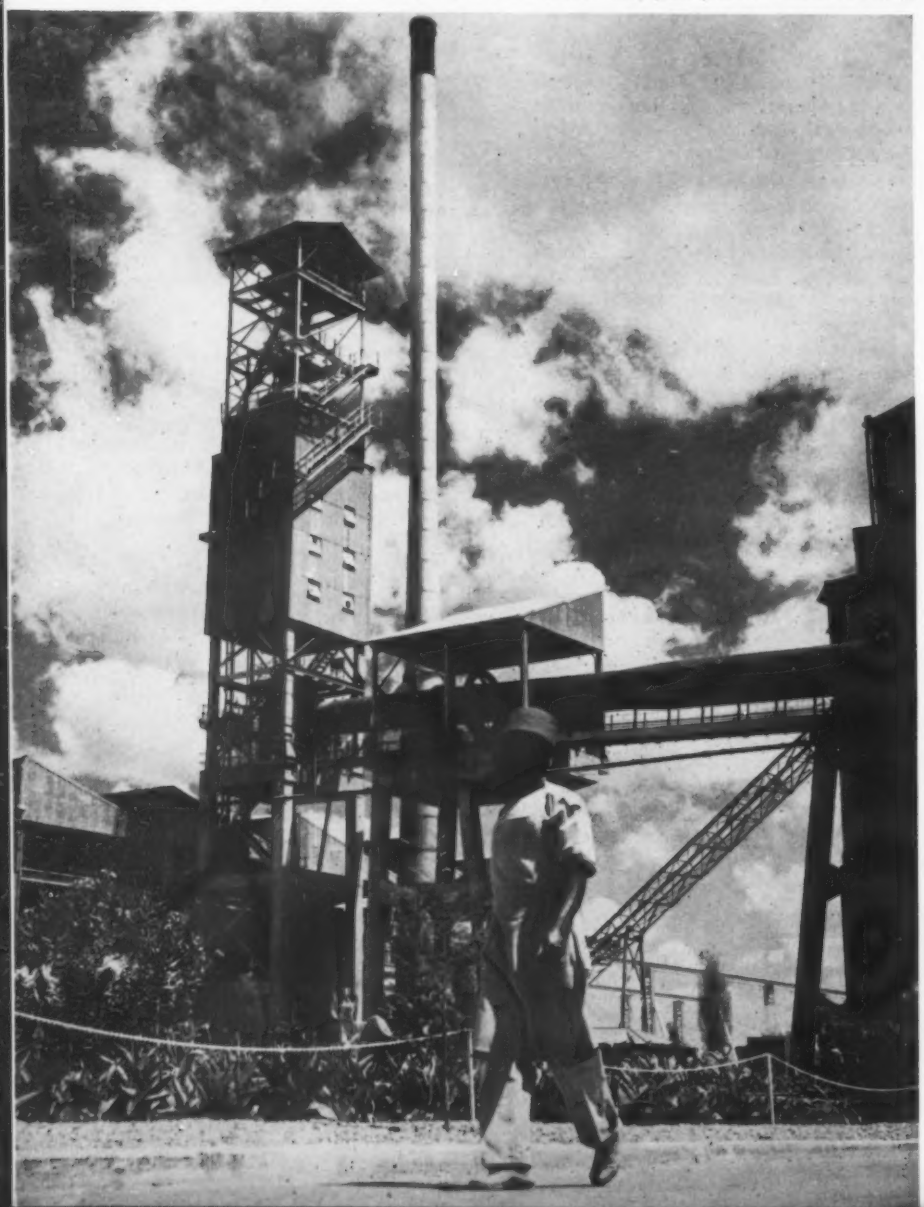
Retail trade has held reasonably steady for the past few months. Commercial bank reports indicate that wholesale trade is quiet. Sales of tractors and agricultural implements, however, have been stimulated by the encouraging prospects of this season's crops.

In Umtali, purchases by the contractors for the $28 million oil refinery have increased the level of retail sales. In the lowveld areas, light engineering concerns and builders' suppliers are profiting from agricultural development projects.

Agriculture is currently the most encouraging sector of the economy and mining now seems to be recovering from last year's decline. Prospects for U.S. sales remain moderately favorable in view of current trends.

Tobacco, Southern Rhodesia's most important agricultural export, was not affected by drought conditions during the early part of the year and a record crop is expected during 1964. The production of sugar, another important cash crop, will also show improvement this year and is expected to increase by approximately 40,000 tons a year during the next 2 years.

SKY HIGH: Like a giant finger, the smokestack of a Rhodesian alloy plant pokes the clouds at Givelo.



Expanding market for auto equipment appears in Italy

Increased sales evidenced in growing car registration

The opportunity for sales of automotive service and maintenance equipment in Italy appears substantial.

The growing demand for such products is indicated by the increasing number of new car registrations. Such registrations for the first quarter 1964, which totaled 259,296, showed an increase of more than 20% over the same period, 1963.

Italian-made cars represented 81.7% of the new car registrations. The remainder was made up of German, French and British manufactures.

While these first quarter figures do not show the effects of the stabilization measures taken by the Italian government earlier this year, the demand for new cars should remain considerable and the total number of registrations should keep increasing.

The total number of motor vehicles presently in circulation in Italy is close to 8 million. A survey made recently shows that out of every 5 car-owning families, 1 owns a second car, and 1 car driver out of every 7 plans to buy another car within 6 months.

Another indication of the increasing demand for automotive service and maintenance equipment in Italy was provided at the Automotive Service and Maintenance Equipment Show held at the U.S. Trade Center in Milan earlier this year. As a result of the one week exhibit, 14 reporting exhibitors estimated that sales within a year would amount to $2,224,500. Orders booked during that 1 week alone amounted to $401,005.

Products exhibited at the Milan Trade Center which were successful in terms of sales included automatic coin operated car washers, dynamometers, steam cleaners, pumps and compressors, automotive electrical testing equipment, power tools, vulcanizers and tire changers.

LICENSE REQUESTED

Manufacturer of weighing equipment seeks license for the production of newly-developed types of light and heavy industrial scales. Write: Snelwegerfabriek Prior, 122 Zuidkade, Boskoop, Netherlands.

BIG MIX-UP: Workers apply cement lining to Lake Yojoa Canal, part of Honduran hydroelectric project.

Honduran economy 'back to normal' after fall coup; foreign trade up

Growing trade with Central American Common Market partners cuts into U.S. share of import market; industrial bank started

Conditions quickly returned to normal in Honduras during the first quarter of 1964 after the military coup d'etat of October, 1963. The regime has been seeking to consolidate its position and organize itself to carry out the day-to-day functions of government.

The coup had relatively little effect on the commercial sector, as shown by a good Christmas buying season and continued high sales activity in the first quarter. Net international reserves at the end of March reached their highest level for that time of year since 1958.

The seasonal increase was strongly influenced by greater earnings from coffee, cotton and lumber exports, and greater sales of exchange by the United Fruit Company for its investment program.

The regime is making efforts to improve the budgetary standing of the country, and decreed a series of tax increases which went into effect Jan. 1.

Imports for 1963 amounted to $95.1 million (CIF), a 19% increase over 1962, and exports (including re-exports) were $83.5 million, 6% higher than 1962. Greater Central American Common Market trade caused the U.S. share of imports by Honduras to decrease from 51.7% in 1962 to 47.8% in 1963, although actual dollar volume increased from $41.3 million to $45.5 million.

Honduran imports from her Central American neighbors, principally El Salvador and Guatemala, were up almost 50% over 1962 and consisted mainly of manufactured, processed and semi-processed goods and foodstuffs. Exports to Central America increased by only 3%, and half of these were made up of corn, beans, cattle and hogs.

Compared to 1962, export values for 1963 decreased by 6% for bananas, but increased from 15% to 25% for coffee, lumber, silver and cotton. Increased sales of plywood and the first shipments of products from the new domestic chemicals plant in Tegucigalpa augmented first quarter Honduran exports to Central America.

Banana exports are expected to rise, even though first quarter shipments were slightly below those of a year ago. The United Fruit Company plans to invest $12 million during 1964 in its Honduran

banana operations and its commercial radio and meatpacking activities, well above its $7.25 million investment of 1963.

The Standard Fruit Company began shipping bananas to France during the quarter, and has a contract with the French Government to provide technical assistance to banana producers in Africa.

Increased coffee exports, 176,000 bags by the end of March compared to 160,000 bags by the same time last year, reflected an early harvest and faster movement to the ports. However, total coffee exports for the 1963-64 season will probably be down 20% because of wind and rain damage during December.

Cotton exports by the end of March amounted to about 15,000 bales, and total exports will amount to between 28,000 and 30,000 bales.

The Southern Pine Beetle epidemic took on devastating proportions during the quarter, and there seems to be *no* hope of controlling it. U.S. Forest Service teams spent several weeks surveying the epidemic in order to advise the Honduran Government on control and salvage procedures.

The political unrest had little effect on general monetary trends. The central government finished 1963 with a smaller deficit than in 1962 by foregoing certain budgeted expenditures. The 1964 budget decreed by the military regime in December was about 4% larger than the 1963 budget, but the new taxes helped raise government income to $9.15 million for the first quarter of 1964, a $1 million increase over a year ago.

The new budget allows an $8 million deficit. The new taxes, which increase the income tax scale, impose a 3% sales tax except on certain basic necessities, levy a 5% export tax on silver concentrates and revamp the inheritance tax, should produce additional revenues estimated at $3 million and hold the deficit at a level that can be financed by prudent credit expansion. Considerable public outcry against the new taxes caused the appointment of a commission to study possible revisions.

At the end of March net international reserves stood at $15.9 million, the highest level for that time of year since 1958, and an increase of $5.5 million over the end of March 1963.

Honduran commercial interests in San Pedro Sula are organizing a private industrial bank, Financiera Hondurena, which has created unprecedented enthusiasm. A $5 million Agency for International Development (AID) loan to the bank was announced by AID representatives in San Pedro Sula on June 11, 1964.

The Bilt-Rite Rubber Corporation of Boston will invest $110,000, in return for 60% of the stock in a San Pedro Sula firm which is building a plant to manufacture "camelback" rubber used to recap automobile tires. A plastics factory, a subsidiary of Polymer International Corporation, began producing plastic banana shrouds in February, and plans are to produce plastic tubing and pipe at a later date.

The Bank of London and Montreal opened its second branch office in San Pedro Sula.

The American Smelting and Refining Company established a regional geologic office for Central America in Tegucigalpa during the quarter.

The long delayed Rio Lindo hydroelectric project began operating at the end of March, and rates to all subscribers were immediately reduced; in Tegucigalpa by about 25% and in San Pedro Sula by about 30%. Construction on the new airport at San Pedro Sula got underway during the quarter, and the contractor hopes to have the 6,560-foot runway completed by October.

The National Economic Council is working on a National Development Plan for 1965-70 which gives top priority to 2 projects the government is already committed to undertaking—the port rehabilitation and expansion at Puerto Cortes and the rerouting and paving of the Northern Highway, both of interest to the World Bank.

Netherlands' surging foreign trade reflects vigorous economic growth

Imports from U.S., world both jump 22% over 1963 levels; U.S. participants in Utrecht Spring Fair report good sales

Vigorous activity marked the Dutch economy during the first quarter of the year. Favored by a mild winter, industrial production, building construction, and foreign trade flourished. The larger Dutch enterprises in their annual reports expressed confidence in the outlook by maintaining or declaring higher dividends.

Total Dutch imports in the first quarter of 1964 were valued at $1.7 billion, 22% higher than in the like period of 1963, while exports reached $1.3 billion, 17% above the 1963 period.

Netherlands imports of U.S. products for the quarter totaled $183 million, also up 22% from the first quarter of 1963. The U.S. share of the Netherlands market was 10.8%, the same as in the 1963 period. The leading U.S. commodities shipped to the Netherlands during the first 2 months of 1964 were oil seeds, grains, coal, cotton, organic chemicals, and plastics.

The very high increases in first quarter 1964 foreign trade are largely attributable to the lowered trade activity resulting from the severe weather in Europe during the comparable period of 1963. In the case of trade with the U.S., the effect of last year's East Coast dock strike also was a contributing factor.

The U.S. export picture was highlighted by the satisfactory results of the second U.S. Government commercial exhibit at the Utrecht Spring Fair in March. Preliminary figures showed that during the Fair itself the American participants sold over $750,000 of merchandise, and expect that a total of about $3 million of business through 1965 would be directly attributable to their participation at Utrecht.

Another event of interest was the April visit of a trade mission organized by the Gas Appliance Manufacturers Association. This industry-sponsored, Government-approved mission spent 2 weeks promoting export sales of U.S.-made gas appliances and equipment.

Figures for some key industrial sectors indicate that 1964 promises to be a record year. The overall production index in January and February showed respective increases of 10.5% and 9.8% over the like periods of 1963.

The most impressive results were attained by the building industry; during the first quarter 18,100 houses were completed, more than ever before in a comparable period. The Ministry of Housing and Building reported that from March 1, 1963, to March 1, 1964, a total of 90,000 units were finished, 20,000 more houses than during the preceding 12 months.

The Ministry also reported that production of prefabricated houses will reach 8,000 units this year, or double the average number produced in 1962 and 1963. At present there are 8 manufacturers of prefabricated houses. This total is expected to rise to 14, as a number of new

factories will soon begin to produce at full capacity.

January production of building materials doubled compared to January 1963.

The steel industry continues to do well. Production in January alone was 226,000 metric tons, the highest ever attained, as against 177,000 metric tons in January 1963.

First quarter coal production declined 1.7% compared to the like period of last year. For some time, Dutch coal has experienced competition from oil and from imports of cheaper U.S. coal, and before long natural gas will constitute an additional rival. Attempts are now being made to increase coal sales to power stations and to boost coal exports.

Exploration for oil and gas continued in the North Sea, the Wadden Sea, and on islands off the north shore, but no new strikes were reported in those areas. In February, a comparatively small reservoir of natural gas was found near Egmond, in the province of North Holland, and production tests were conducted.

On the investment scene, the First National City Bank of New York established a branch in Amsterdam, becoming the third U.S. banking institution to locate there.

Popular demand, reinforced by plans for a privately-owned television station outside Dutch territorial waters, finally led to the opening of a second television network.

On the labor front the major development of the first quarter was the implementation of the general wage agreement of October 1963. The majority of the new wage contracts, however, exceeded the agreed 10% to 12% increase. The overall average increase of the new contracts came to 11.6%, excluding social provisions. In the important construction industry (250,000 workers) basic rates jumped 16%.

Prices increase

Prices of many consumer items began to rise at the same time as the granting of the wage hikes. By April prices for consumer goods had risen 7% above December levels.

In the transportation field KLM entered into a number of cooperation arrangements with other airlines, and, after a long period of hesitation, decided in January to apply for membership in the proposed European Air Union.

Developments in the finance sector during the first quarter were aimed at restraining the inflationary impact of the wage-price spiral. Such measures included deferment of certain government investment expenditures until October, tightening of consumer installment credit, suspension of accelerated depreciation allowances for new construction, and tax increases on cigarettes and gasoline.

The balance of payments for 1963 as a whole showed an overall surplus of $138 million and a favorable current account balance of over $238 million. Substantially higher invisibles earnings and a lower trade deficit than in 1962—despite a sharp rise in the fourth quarter trade deficit—were mainly responsible for the sizeable surplus.

Weather conditions during the first quarter were favorable to the development of winter grains and to the preparation of soil for spring plantings.

BOOM AND BUSTLE: Cranes loom high over the ships at dock in a busy section of the Rotterdam harbor.

Livestock numbers were down sharply from 1963, resulting in a continuing tight beef situation and lower milk production throughout the year. Three increases in the price of milk to consumers have occurred since October 1963, making the current retail price $0.15 per liter.

Because continued high prices for beef and veal have adversely affected domestic consumption, the Product Board for Livestock and Meat announced a liberalization of import requirements. As of May 14, imported beef and veal were permitted to be sold by local retailers for the first time in many years. This, combined with less stringent import regulations, should aid U.S. efforts to sell beef in Europe.

Switzerland wants more imports to help keep price levels down

The Swiss economy continued to flourish in the first quarter of 1964, as all main industries increased production despite a persisting shortage of labor. Retail sales were higher than in the same period a year ago and the tourist trade was livelier.

Imports rose 17% over a year ago and exports increased 9%.

Although the price indexes changed only slightly, inflationary pressures were still evident. In an effort to combat these pressures, the Government promulgated an extensive anti-inflationary program.

The economy, however, will probably continue to operate at a high level, and opportunities for U.S. exports remain excellent. The Swiss Government welcomes imports as an anti-inflationary device.

Swiss industry continued to operate at full capacity in the first quarter. A survey of the machine and metals industry in March revealed an average order backlog of over 9 months. The demand for machine tools has recently increased and delivery dates for some special machine

tools are 2 to 3 years after receipt of the order.

The telecommunications industry is also reported to be fully occupied with order backlogs of 2 to 3 years in some instances. The textile industry, which experienced some slack periods in the first half of 1963, reported that the business outlook improved during the first quarter of 1964.

Retail sales up

Retail sales continued at record levels. The value of sales in January was 8.8% greater than in January 1963, and the corresponding rise in February was 15.4% over February 1963. Sharp gains were recorded in the sales of furniture, typewriters, men's and women's clothing, leather goods, office equipment, automobiles, watches and jewelry. Sales of winter sports equipment, fuels, hats and umbrellas were relatively slow due to the extraordinarily mild winter.

According to Swiss retailers, U.S. glassware for homes and restaurants is finding wide approval. Items which have been reported in unusually heavy demand in the stores include expensive porcelain dinner services as well as individual vases or figures; women's outer wear and undergarments; men's ready-made clothing, especially in synthetic fibers, and musical instruments.

Other items which represent particularly good sales prospects, according to market research firms, are cosmetics and pharmaceutical items, sporting goods, mouth thermometers, toys and optical articles.

There also appears to be much interest in health foods. Products for dieting, special bread, and low calorie processed foods are becoming increasingly popular.

Many of the items mentioned reflect the affluence of Swiss society today. There is higher disposable income and more leisure time, both of which are remolding the buying habits of the Swiss consumer.

Since retail stores have experienced many difficulties in finding sufficient sales personnel, many firms are trying to modernize and introduce labor-saving features. The opportunities for U.S. exporters in this field appear very good.

Swiss firms have recently expressed interest in importing the following products from the U.S.: home and hotel furniture, curtain and carpet fabrics, lighting fixtures, decorating and upholstery materials, continuous-heating furnaces, small portable stoves, infrared heaters, catalytic heaters and refrigerators for butane and propane cylinder gas, pet food, kosher foods, canned shrimp, canned real turtle soup, medical supplies, redwood, Douglas fir, Carolina pine, walnut, and all kinds of resinous woods.

The consumers price index, which rose 3.2% during 1962 and 3.9% during 1963, continued its upward trend, but at a much slower pace. At the end of March the index had risen only 0.3% since the first of the year. The wholesale price index actually declined 0.1% in the first quarter.

Swiss exports during the first quarter totaled $604 million, compared to $544 million a year earlier. Imports reached $873 million, compared to $746 million in 1st quarter 1963. The resulting trade deficit was $269 million, against $199 million the year before.

All sectors of Swiss industry reported improved sales of their products abroad. In some branches, such as mechanical engineering and the watch and chemical industries, the gains in exports over the first quarter of 1963 were considerable.

Increased prices for raw materials and semi-finished products, as well as substantial purchases of foreign manufactured goods, were mainly responsible for higher imports. The principal imports were machinery, finished chemical products, chemical and pharmaceutical raw materials, aircraft, automobiles, liquid fuels and gasoline, plastic materials, textiles, jewelry, rubber goods, iron and steel, lumber, pulp and paperboard.

U.S. exports climb

The U.S. remained Switzerland's top overseas supplier. Swiss purchases of U.S. goods climbed 33% above those for the comparable period of 1963, reaching $82 million. Swiss exports to the U.S. increased only 3% to $49 million.

New regulations applicable to foreign money were put into force on March 31. They continue the previous prohibition of interest payments on foreign money and require that any such money not invested abroad at the end of each month be paid into a sterilized account at the Swiss National Bank. These regulations also restrict investment of foreign money in domestic Swiss assets and property.

Housing construction remained active in the first 3 months of 1964, due to the favorable weather. The issuance of building permits increased very markedly due in part to the desire to beat the gun on the impending restrictions on construction activity. Some 10,440 permits were issued in the first 3 months of 1964, an increase of 4,553 over the corresponding figure the year before.

The anti-inflationary program also introduced restrictions on non-essential construction in favor of low-cost housing.

AID loan to help complete Greek plant

An AID loan for $7.7 million will help Greece to complete its largest hydroelectric dam and power station.

The installation, being constructed by Kaiser Engineers and Constructors, Inc., will provide new power capacity of 400,000 kw. on completion of its 4 generators, expected in September, 1966.

Supplementing a 1960 U.S. loan of $31 million, the new financing will provide for additional U.S. materials, equipment and services required for the project, located at Kremasta in southwestern Greece.

Necessary changes in the dam design and in the method of construction caused a requirement for more goods and services of U.S. origin than originally planned. Total costs of the project are substantially unchanged, however.

The contractor has provided for more U.S. equipment and U.S. supervisory services than had been included in engineers' estimates, thus increasing the dollar component of the contract and the dollar financing requirement. Local currency costs, which are financed by the Public Power Corporation, are estimated at $34.9 million equivalent, for a total project cost of $73.6 million.

The new supplementary loan is repayable in dollars by the Public Power Corporation over 25 years, including a 5-year grace period.

LICENSE REQUESTED

Manufacturer of machine tools, textile machinery, and weapons, seeks license to make machine tools and displacement pumps for the chemical industry. Write: Hispano Suiza (Suisse) S.A., 110 rue de Lyon, Geneva, Switzerland.

JOINT VENTURE ASKED

Manufacturer of automotive batteries seeks licensing or joint venture arrangement with U.S. battery manufacturer. Write: Raylite Batteries, (Pty), Ltd., P.O. box 166, Benoni, Transvaal, South Africa.

CONTROL DEVICE MANUFACTURE

Manufacturer of relays, micro-relays, safety and control devices for fuel burners, seeks license from U.S. company to make control devices for gas burners. Write: Etablissements Petercem, 210 Ave. Felix Faure, Lyon, Rhone, France.

AID authorizes 5 loans to Turkey to help development program goals

U.S. loans totaling $32 million announced at Paris meeting of 14-member international consortium

Five new loans to Turkey totaling nearly $32 million have been authorized by the Agency for International Development to help that country achieve the goals of its 5-year development plan (1963-67).

The loans will be made to both public and private enterprises and involve substantial Turkish contributions. They were announced in connection with a Paris meeting of an international consortium for assistance to Turkey. The consortium includes 14 member nations of the Organization for Economic Development and Cooperation (OECD) and the World Bank.

Projects for which the 5 loans were authorized include:

Dam construction

Construction of the Ciceroz Dam, 300-mw. hydroelectric plant, and 97 miles of 154-kv. transmission lines. A $20.4 million AID loan will finance U.S. procurement. Local costs of the $62.1 million project, equivalent to $41.7 million, will be met from Turkish resources. The area to be served is the most industrialized in Turkey and is expected to be the site of its greatest economic growth.

Financing of loans

A $5 million loan for the further capitalization of the Industrial Development Bank of Turkey will permit the Bank to finance medium and long-term loans to private industries requiring U.S. goods and services. This loan is entirely tied to purchases in the U.S. The bank is credited with financing a significant portion of private industrial investment in the last 12 years.

Tire plant expansion

A dollar loan of $2.5 million and a local currency (Cooley) loan of $2.2 million will be made to the Goodyear Lastikleri tire plant to increase its annual capacity by 75%. The company is jointly owned by U.S. and Turkish interests. The "Cooley Loan" will be made from Turkish liras paid for U.S. surplus products under the Food for Peace program. Turkish banks are furnishing working capital loans equivalent to $7.5 million toward the $12.2 million total for the expansion program.

Coal-washing plant

A $1.1 million loan to finance U.S. procurement needed for a 360-ton-per-hour coarse coal washing plant at Tuncbilek replacing an obsolete plant of less than half that capacity. The loan also will finance vehicles or components needed to increase open-pit operations. Local costs equivalent to about $1.1 million will be met from Turkish resources.

Mineral survey program

A $320,000 loan for procurement of U.S. aerial mineral survey equipment and services of a consultant in connection with exploration for mineral deposits over a wide area.

All dollar loans are repayable in dollars by the Turkish Government within 40 years, including a 10-year grace period.

The dollar loan to Goodyear will be repayable in Turkish liras to the Turkish Government over 10 years with a 2-year grace period. Dollar repayment to the U.S. will in turn be made by that Government over the longer term.

The Goodyear "Cooley Loan" is repayable to the U.S. in liras over 10 years, including a 2-year grace period.

Israel, U.S. amend Food for Peace pact

A Food for Peace agreement with Israel has been amended to finance the sale of $400,000 worth of cheese, about 882,000 pounds, from U.S. suppliers. Payment will be in Israeli pounds.

Financing of the sale will be from funds provided in a Title I, Public Law 480 agreement of December, 1962. Sales will be by private U.S. traders.

London firm loses U.S. export rights

A London import-export firm, L. Kanner & Son Ltd., which also trades as "Peak Products Company," and L. Kanner, a director, have been denied U.S. export privileges for at least 2 years as a result of the illegal reexport of 4 U.S. tractors from the United Kingdom to Cuba.

The Department of Commerce charged that the respondents knew, or should have known, that the tractors valued at $120,000, were of U.S. origin and could not be reexported to Cuba without permission of the U.S. Government.

The denial order was issued after the Kanner firm failed to answer formal charges resulting from an investigation by the Department's Bureau of International Commerce.

Effective June 11, the order revokes all outstanding export licenses in which the respondents have any interest and forbids them to export or reexport U.S. goods and technical data until the order is lifted or a conditional restoration of privileges is granted.

The order also forbids any other person to participate in transactions with the respondents involving exported U.S. commodities and technical data on penalty of loss of their own U.S. export privileges.

The sanctions apply for the duration of the Export Control Act but the respondents have the right to ask for a conditional restoration after 2 years.

Guinea to buy U.S. food under Food for Peace plan

The U.S. and Guinea have signed a Food for Peace agreement to increase the latter's food supplies and improve the diets of its people by financing the sale of $8.57 million worth of U.S. agricultural commodities under Title I, Public Law 480.

Commodities to be purchased include wheat flour, vegetable oil, condensed milk, evaporated milk, dry whole milk, butter, cheese, frozen chicken, and inedible tallow.

Payment will be in Guinea francs. Sales will be made by private U.S. traders.

Switzerland announces extensive anti-inflation program to control excessive economic expansion

Regulations issued cover foreign capital, bank credit, capital issues, construction, employment of foreigners

The Swiss Government recently promulgated an extensive anti-inflation program consisting of a series of measures designed to control excessive economic expansion.

Specific regulations have been issued to control foreign capital, domestic bank credit, capital issues, construction activity, and the employment of foreign workers. Reductions of certain customs duties are currently under consideration.

The principal provisions of the various new regulations already in effect are summarized below:

Foreign capital

With minor exceptions, no interest may be paid by Swiss banks or other financial institutions on foreign funds converted into Swiss francs after last January 1. All foreign funds so converted must be paid into a special "sterilized" account at the Swiss National Bank.

Such funds must remain in the account for at least 1 month and subsequently may only be withdrawn for transfer abroad. All institutions handling foreign funds are prohibited from investing such funds in Swiss securities, real estate, or mortgages either directly or for the account of a foreigner.

Exemptions are made, however, for reinvestment in securities of funds accruing from the sale of Swiss securities.

Bank credit

The regulations on credit apply to all banks with assets of $2.3 million or more and cover loans and credits to persons or firms domiciled in Switzerland. They apply to persons domiciled abroad when the credits are to be used in Switzerland. The regulations place ceilings on the rate at which all types of credit may be permitted to increase during 1964. These ceilings are based on the rates of increase registered during 1960 or 1961, whichever was greater.

In no case, however, will the allowable rate of increase be less than 6% of the level at the end of 1960 or 1961. In granting credits the banks must give priority to those applications which are of benefit to the Swiss economy as a whole, in particular, for housing, agriculture and for financing of imports. Increases in mortgage investment are to be principally confined to mortgages for new housing.

Under certain circumstances the National Bank may grant special exemptions to commercial banks to exceed their ceilings, in particular for certain classes of building credits.

Capital issues

Public issues of $1.2 million or more of stocks, option certificates, bonds and similar securities must be reported by the issuing organization to the Swiss National Bank. The latter may institute spacing of the issues to avoid excessive demand on the capital market.

Issues may be offered only with the permission of a special Commission set up by the National Bank in accordance with a program approved by that Bank. Flotation of foreign securities on the Swiss capital market will continue to require prior approval by the Bank.

Construction

Construction of sports arenas, theaters, museums, administrative offices, gasoline stations, and other low-priority buildings is prohibited for a period of 1 year, and this prohibition may be further extended. However, hospitals, non-luxury apartment buildings, certain other high-priority buildings and buildings costing less than $58,100 may continue to be built without quantitative restrictions.

All other construction activity will be held to a predetermined level through a system of building permits. The Federal Government shall establish a different level for each canton on the basis of the average annual volume of construction recorded in the canton during the 1959-1962 period. The cantons shall issue the permits according to Federal guidelines.

Foreign workers

Swiss firms employing foreign workers shall not increase the total number of their employees—Swiss and foreign—above a certain base figure. Generally, the base figure for each firm is the number of employees on its rolls as of last March 1, or the average number of persons employed by the firm throughout 1963, whichever is greater.

Furthermore, new foreign workers may be hired by a firm only when its labor force falls below 97% of the base figure. In such cases, new foreign workers may be hired to bring the labor force up to 97% of the firm's base figure. Should the number of foreign workers in the country continue to increase, the Federal Government may reduce the 97% ceiling to 95%.

Tariffs

The Department of Public Economy has prepared lists of items where tariff reductions are expected to have an anti-inflationary effect. These lists have been submitted for comments to other government agencies and to private trade associations. The Government is expected to declare shortly what action, if any, will be taken regarding tariff reductions.

Germany sets quota for canned wax beans

Germany has established an import quota of unannounced size for canned wax beans (cut) from the U.S. and Canada. Applications for import licenses may be submitted until the quota is filled but not later than Dec. 30. Import licenses will be valid until Dec. 31; first day of customs clearance was July 1.

The so-called visa procedure applies. Import licenses which do not specify Deutsche Mark amounts will be issued. Importers then present invoices to the Foreign Trade Agency, which registers and stamps with "visa" so that the commodity may be cleared through customs.

Upon exhaustion of the value limit licenses will still be issued for commodities purchased on the day the exhaustion of the quota is announced and will be valid if the commodity has been loaded on board ship at the latest, 10 days after such announcement.

U.S. firm granted 'negative clearance' in EEC decision

Antitrust proceedings involve a U.S. enterprise for first time

The Commission of the European Economic Community, for the first time, has issued a decision under the Rome Treaty antitrust provisions (Articles 85 and 86) involving a U.S. firm.

The Commission issued a "negative clearance" in the case of a distributorship agreement between the Bendix Corporation and a Belgian firm.

The issuance of a "negative clearance" means that the Commission does not intend to intervene in this matter in view of its determination that the agreement does not restrict competition in the Common Market.

Under the agreement, the Belgian firm, Mertens and Straet, will become a Bendix Distributor and sell brakes, servobrakes and accessories manufactured by Bendix. The agreement does not provide for any exclusive distributorship for the Belgian firm or for any limitations on its marketing area.

Agreement terms

The agreement also gives Bendix the right to designate additional distributors of its products in Belgium and sell directly to customers, Mertens and Straet, as independent dealers, will maintain adequate stocks and offer satisfactory guarantees and service for the Bendix products. The firm may also deal with Bendix' competitors.

The "negative clearance" in the Bendix case is the second one granted by the Commission.

Earlier this year it ruled that an exclusive dealership agreement between a French and a Swiss firm did not appreciably restrict competition in the Common Market and was therefore not subject to action by the EEC under its antitrust provisions.

Firms desiring to clear any agreements concluded after March 1962 with the EEC must register them with the Commission. At present approximately 36,000 agreements are registered under the EEC's antitrust regulations.

Integration of economies promoted by EEC Council

The Council of Ministers of the European Economic Community has issued 3 decisions to implement coordination of Member State economic policies called for in Articles 105 and 145 in the Treaty of Rome establishing the Common Market.

The decisions involve creation of a Committee on Budget Policy, composed of representatives from each Member State and from the EEC Commission, to study and compare Member State budget policies. The Monetary Committee and the Business Cycles Committee will also participate in the activities of the new Budget Policy Committee.

Another decision creates a Committee of the Governors of the 6 Member State Central Banks to study general characteristics of the Member States' central banking policies and to adopt measures to make central banking policy more effective, especially with respect to the control of credit, the operation of the money market and the market for foreign exchange.

Discussions will be instituted in the Monetary Committee on the operation of the international monetary system and measures adopted to facilitate joint Member State action in meeting international liquidity problems in the third decision.

Jordan's metric system

The Council of Ministers of Jordan has implemented the law providing for standardization of weights and measures on the metric system. This new system, which went into effect July 1, replaces various local measures formerly in use.

Social security allowance raised in Netherlands

The Netherlands Government will raise old age pension allowances, beginning January 1, 1965, from $759 to $911 for a married couple. For a single person the allowance will go up to $635 per year.

The expenditure will be covered by an increase of between 1.5 and 2% in the compulsory contributions payable by all workers, raising the rate of contributions to 8.5% of incomes.

Comprehensive law regulates Belgium's pharmaceutical trade

King will enforce new rules governing all drug traffic

A new comprehensive law, governing all phases of traffic in medicaments, has become effective in Belgium.

The term, medicaments, includes all drugs, substances, preparations or compounds, represented as having curative or preventative properties, intended for human or veterinary medicine.

The law empowers the King to regulate the importation, exportation, manufacture, preparation, transport, distribution, possession, preservation, offer for sale, sale, transfer, and the delivery of medicaments.

The medicaments must conform to the requirements of the pharmacopoeia, a copy of which must be kept in all facilities authorized to distribute medicines. All persons authorized to dispense medicinal products may be required to maintain in their establishments specified equipment, apparatus, instruments, and reagents.

Registration required

All medicaments must be registered with the Ministry of Public Health before being placed in trade. Where reasons exist to indicate that the effects of a medicament could be harmful or appear to be insufficiently known delivery can be suspended.

Falsified or imitated products will be seized. Medicines which are deteriorated, altered, or do not conform to the law, will be subject to immediate destruction.

Advertising of medicinal products is subject to regulations and any advertising not in the public interest will be suspended or prohibited. It is forbidden to give, solicit, or accept any premiums or benefits, either directly or indirectly, in connection with sales of medicaments and the granting of samples is regulated.

In a subsequent action, a royal decree was promulgated, regulating the discounts permitted on the price of pharmaceutical specialties.

A loan copy of the new legislation in French is available from European Division, Bureau of International Commerce, Washington, D.C. 20230.

Changes in foreign governments' import, exchange permit rules listed in summary

Includes regulations altered after worldwide summary report published early this year; copies of previous rules available

Recent changes in foreign governments' import-license and exchange-permit requirements applicable to goods of U.S. origin and and to other goods payable in U.S. dollars are summarized below.

Listed are countries for which regulations have changed since the previous worldwide summary was published in INTERNATIONAL COMMERCE, Jan. 6, p. 9-12. Newly-created countries are included also, with notations that controls have not been revised.

Reprints of a previous summary may be obtained for 10¢ each from the Publications Sales Section, Department of Commerce, Washington, D.C., 20230. More detailed information on licensing and exchange controls may be obtained from Department of Commerce Field Offices or from the Office of International Regional Economics, Bureau of International Commerce.

Africa

MALAWI (formerly Nyasaland and member of former Federation of Rhodesia and Nyasaland)—Import license necessary, but all goods are importable freely under open general license. Exchange permit required, but import license carries right to foreign exchange. (No change.)

NORTHERN RHODESIA—Same as Malawi.

SOUTHERN RHODESIA—Same as Malawi.

TANGANYIKA AND ZANZIBAR, UNITED REPUBLIC OF—Imports enter under open general license or specific license. Import license carries right to foreign exchange. (No change.)

Europe

SWITZERLAND—No import license necessary except for a few agricultural products. No exchange permit required.

UNITED KINGDOM—Import license not required except for a limited number of products, for example: grapefruit, grapefruit juice, orange juice (except frozen), fresh apples and pears, commercial airplanes, and cigars. Exchange permit required but is issued automatically.

Near East-South Asia

BURMA—Import trade nationalized. All overseas purchases effected by Government agencies, some by direct negotiation but mostly on open tenders.

Far East, Oceania

CAMBODIA—Import license necessary. SONEXIM, the state trading agency, carries out all import operations in accordance with the Government controlled Import Plan. Trade associations have sole authority to work with SONEXIM. Import licenses are issued by the Department of Commerce and submitted to the Cambodian National Office of Foreign Exchange for approval. The Office releases foreign currency in conformity with the Import Plan and maintains strict control over non-essential imports.

INDONESIA—A combined import/exchange license is necessary except for imports of essential goods, raw materials and equipment made with Automatic Foreign Exchange Allocations called SPP's (20% of export proceeds which exporters are allowed to use themselves or sell to others); and imports by exporter/producers of equipment, spare parts, and raw materials for their own use, made with their own foreign exchange (5% of f.o.b. export proceeds).

KOREA, REPUBLIC OF—Import license necessary from Ministry of Commerce and Industry except for a few items importable on an "automatic approval" basis. Exchange permit now required; import license carries right to foreign exchange.

Western Hemisphere

VENEZUELA—Import licenses required for selected articles including those items which are eligible for subsidies from the Venezuelan Government. There is now one exchange rate applicable to all imports, which replaces several rates previously in effect for import transactions. Exchange permits are not required as exchange for all permitted imports is allowed at the new exchange rate.

Malaysia announces auto assembly policy

The Malaysian Minister of Commerce and Industry recently announced a joint policy adopted by Malaysia and Singapore for the establishment of auto assembly plants.

A protective tariff is proposed at rates not in excess of 30% ad valorem on assembled and 20% on semi-assembled vehicles. Imports of parts going into auto assembly, with the exception of tires, tubes and batteries, will be admitted duty free.

The proposed tariff levies are in addition to present registration fees. Assembly plants will not be eligible for pioneer industry incentive status (tax exemption), but pioneer status will be considered for local manufacturers of components.

Auto assembly plants are expected to achieve economical operation status within a reasonable period after establishment, and then to move on progressively into the manufacture of component parts. To date, 10 firms have inquired about the possibility of establishing assembly plants.

France liberalizes imports of certain dollar products

France has announced the liberalization of imports from the U.S. and other countries of the Organization for Economic Cooperation and Development of a variety of agricultural commodities.

The products affected, with tariff numbers in parentheses, are: walnuts (08.05); dried peaches, nectarines, apples and pears (08.12); castor oil (15.07); prepared or preserved game and rabbit (16.02); chewing gum (17.04); sugared frozen fruit (20.03); and apricot juice (22.07).

The move was published in the June 7 French Official Gazette.

New customs agreement signed by Benelux

Representatives of Belgium, the Netherlands, and Luxembourg have signed a new customs agreement.

Following ratification by all 3 parliaments, turnover and other indirect taxes will be collected from the importer at the goods' destination, instead of by customs officers at the frontier.

For the first 6 months, the agreement will apply only to certain undetermined categories of articles. The agreement is expected to cover all goods by January 1, 1968.

Germany to resort to minimum price system

Germany has informed the Commission of the European Economic Community (EEC) of its intention to resort to a minimum price system in 1964/1965 in order to control imports of the following fruits and vegetables:

Apples, pears, greengage plums, mirabelle plums, tomatoes, cauliflower, endives, turnips, cherries, strawberries, stringbeans, gherkins, cucumbers, and black currants.

This measure is being taken in accordance with Article 44 of the Rome Treaty, which established the EEC. According to this article, Member States are permitted to utilize a minimum price system "below which imports may be temporarily suspended or reduced, or made conditional on their price being above the minimum price fixed for the product concerned."

The use of such a system is justified as a substitute for quantitative import restrictions which must be progressively eliminated according to schedule.

Germany will publish the minimums 3 days before they become effective.

New tariff schedule adopted by Sierra Leone

The Sierra Leone Government has adopted new tariff changes which generally provide for duty increases but also have the effect of reducing the margin of preference extended to goods of United Kingdom and Commonwealth origin.

Sierra Leone's tariff is 2 column with preferential rates extended to the U.K. and Commonwealth, and "general" (i.e., higher) rates to all other countries.

A revised tariff schedule was recently announced by the Sierra Leone Prime Minister in his budget speech to Parliament in which preferential duties were generally raised by 50% in relation to the schedule of non-preferential rates. The action, in effect, makes Sierra Leone a more competitive market for non-Commonwealth imports, including those from the U.S.

As an additional measure, "general" (non-preferential) duty rates on selected items were increased. Items subject to "general" rate increases include: motion picture film, jewelry, radios, optical instruments, cameras, marine machinery and accessories, lubricating oil, gasoline, nails, cements, furniture, and paint.

The revised tariff schedule is available on a loan basis from the Africa Division, Bureau of International Commerce, Washington, D.C., 20230.

Law governing foreign investment issued in Yemen

Investment permitted in enterprises if economic development helped

Yemen has passed a law defining the place of foreign investment in its economy.

In general, foreign investment is permitted in any type of enterprise as long as it contributes to the economic development of the country.

The term, "foreign capital," includes currency, equipment, materials, inventions and patents introduced into Yemen as well as re-invested profits; however, it excludes foreign currency brought in for other reasons, e.g. living expenses.

Profits may be transferred abroad with the approval of the Foreign Investment Committee, and after 5 years the invested capital may be repatriated at the annual rate of 20%, in the same currency as it was originally brought in.

Investment committee formed

The Foreign Investment Committee will be formed in the Ministry of Economy and will be composed of representatives of the Ministry of Finance, Ministry of Economy and the Yemen Reconstruction and Development Bank.

Its responsibilities will include evaluation and approval of projects from the point of view of their contribution to the national economy; estimation of the value of the foreign capital invested; provision of legal, administrative and statistical information to those interested in investing in Yemen; and facilitation of the entrance and residence of foreigners connected with investment projects.

Where Arab and other foreign capital compete for a given project, the former shall have priority. Further information may be obtained from the Near East-South Asia Division, Bureau of International Commerce, Washington, D.C. 20230.

Germany opens beef quota

Germany has established a quota of unannounced size for imports of beef (fresh, chilled and frozen) and slaughter cows, bulls and oxen from all countries. Applications for import licenses may be filed through July 15.

Tunisia signs agreements for petroleum explorations

The Government of Tunisia has signed agreements with French oil companies for the launching of a vast program of petroleum exploration on the Tunisian mainland and off-shore on the continental shelf of Tunisia, according to local press reports.

The interested companies are the *Societe de Recherches et d'Exploitation des Petroles en Tunisie* (SEREPT), *Societe Nationale des Petroles d'Aquitaine* (SNPA), *Regie Autonome des Petroles* (RAP), *Societe de Participation Petroliere* (PETROPAR), and *Bureau des Recherches de Petrole* (BRP).

Petroleum exploration will be carried on in the Gulf of Hammamet and Gulf of Gabes and in the regions of Feriana and Beni Khalled. Two permits for off-shore exploration have been assigned, one to PETROPAR for the Gulf of Hammamet and the other to SNPA in association with RAP for the Gulf of Gabes.

Minimum expenditures under the 2 off-shore permits will be approximately $4.8 million. Exploration in north central Tunisia will be undertaken jointly by SEREPT and SNPA and investments will amount to approximately $3.6 million.

Coffee, tea duties reduced by Austria

The Government of Austria has reduced temporarily import duties on coffee and tea.

The reductions, with previous rates in parentheses are tariff no. 09.01-A unroasted coffee, free ($22.80 per 100 kg.); 09.01-B roasted coffee, $39.90 per 100 kg. ($76 per 100 kg.); 09.02 tea, free ($49.40 per 100 kg.); 21.02-A coffee extracts, 24% (30%).

The following notes are also applicable to the subject tariff numbers:

09.01-B the duty on products imported in separate packings not containing more than 5 kg., shall be increased by 30%; 09.02 the duty on tea imported in separate packings containing 3 kg. or less shall be $38 per 100 kg.; 21.02-A the duty on products imported in separate packings not containing more than 1 kg., will be increased by 30%.

These reductions are temporary in nature and may be revoked at any time. They are offered with the stipulation that the advantage derived from lower import duties be passed on to the ultimate users as a contribution to the Government's price stabilization program.

Finland tightens antitrust procedures

In a move to tighten antitrust procedures, the Finnish Parliament recently passed a revised "law for the promotion of economic competition" which became effective July 1, according to the U.S. Embassy in Helsinki.

Earlier Finnish antitrust legislation had relied entirely on registration of cartels and publicity to discourage activities hampering free competition.

Under the new law a Government Board for Freedom of Trade will be created with authority to negotiate with business firms and associations engaged in activities limiting competition. If necessary, the Board will have power to order suspension of such activities for a period up to 1 year.

For more details . . .

Further information on current foreign government trade and investment regulations, can be obtained from the Bureau of International Commerce, Office of International Regional Economics, Department of Commerce, Washington, D.C., 20230, or as indicated in individual stories.

On the question of price fixing by cartels or other business associations, the new law entirely changes the emphasis of Finnish antitrust legislation. Previously, price-fixing was permitted except when specifically forbidden. Under the new law, price-fixing is declared illegal except when special permission is granted by the Board for Freedom of Trade. The new legislation does not apply to agriculture, fishing, labor unions, or international trade.

A copy of the new law, in English, is available in the European Division, Bureau of International Commerce, Department of Commerce, Washington, D.C., 20230.

Tobacco excise taxes reduced by Belgium

The Belgian Government has reduced excise taxes on cigarettes and smoking mixtures.

The new rates, which became effective June 1 (prior to June 1 in parentheses), are as follows: cigarettes, 57.5% (60.5%); smoking mixtures, snuff, chewing tobacco (dry), 34% (37%).

These reductions result from a request by the Belgo-Luxembourg Tobacco Manufacturers Association (FEDETAB) to readjust the profit margin for manufacturers which has been narrowed in recent years by increased production costs and higher prices for raw tobacco.

Also, on June 1, prices of popular brands of cigarettes at the retail level were increased to 27¢ a package. Retail prices for smoking mixtures were not increased.

Central reserve bank set up in Malawi

Malawi has a Reserve Bank which will issue currency, maintain external reserves adequate to safeguard the international value of the currency, promote monetary stability, and act as banker and advisor to the Government.

The Malawi pound, when introduced, will be on a par with the British pound (£1 = $2.80) and should completely replace the currency of the dissolved Federation of Rhodesia and Nyasaland by mid-1965.

According to Malawi bankers, the Reserve Bank should have little difficulty in maintaining adequate external reserves and, as long as the Government continues a conservative monetary policy, the value of the Malawi pound should remain stable.

Austrian Cabinet approves safety regulations draft

The Austrian Cabinet has approved the draft of a law dealing with safety regulations and standards for electrical equipment.

It is believed that this law, which will become effective 6 months after its publication, will be enacted this fall. The main purpose of the law is to create a constitutional basis for the existing Austrian Electrical Code.

It contains the provision that electrical equipment not made in accordance with the Code stipulations must not be sold on the Austrian market.

Leather imports

Germany has removed its quantitative import restrictions on bovine leather (Tariff No. 41.02). The product had been under a GATT waiver which expired May 31.

Trade controls eased in Somali Republic

New foreign trade regulations, published on June 3 by the Somali Republic as Supplement No. 1 of *Official Bulletin No. 4*, should afford a good opportunity for U.S. exporters to obtain a market for their products in Somalia.

Previously, items in which the U.S. could compete were excluded from the market because of stringent foreign exchange regulations and preferential trade arrangements.

These items included medicinal and pharmaceutical products, automotive batteries and spare parts, transport, agricultural, power, and construction equipment, as well as a wide range of consumer goods.

The law containing the new regulations, in essence, cancels the effect of preferential bilateral trade agreements currently in force with Italy, the United Arab Republic, and the USSR and is designed to liberalize imports from hard currency areas.

Self-sufficiency in fertilizer production seen for Taiwan

By the end of 1964 Taiwan will have reached a level of self-sufficiency in the production of certain types of fertilizer as a result of an intensive expansion program of the fertilizer industry following World War II.

Since 1945, when, as a result of Allied bombings, only one plant on Taiwan was able to produce fertilizer, total production has increased at a tremendous pace, and is expected to reach over 1 million metric tons this year.

This should exceed local needs for nitrogenous fertilizer by over 240,000 metric tons, while the deficiency in locally-produced phosphatic fertilizer is expected to be overcome in 1965.

Since Taiwan has no potash, potassium fertilizer, which has come largely from the U.S. and Germany, still will have to be imported.

Recent developments, including the construction of a new U.S. $22.5 million urea plant by Mobil-China-Allied Chemical Industries, a joint Sino-American enterprise, have greatly increased fertilizer production to a level where Taiwan now will have a surplus of certain fertilizers.

This surplus fertilizer is expected to be used for expansion of fertilizer exports. There has been a limited export program since May 1959, earning $2.3 million in 1962. The principal market areas for these exports have been in the Far East and the U.S.

Trade Mission to United Kingdom develops numerous manufacturing opportunities in electronics field

Group returns with license offers, joint ventures from British companies for U.S. manufacturers here, abroad

The recent U.S. Trade Mission to the United Kingdom, a specialized mission in the field of electronics, developed many manufacturing opportunities in a variety of other industrial fields.

Seven British firms seeking U.S. firms to produce their products under licensing arrangements are included in the investment opportunities listed below.

Licenses offered

Names and addresses of the following British companies offering manufacturing licenses to U.S. firms are available from the Office of International Investment, Bureau of International Commerce, Department of Commerce, Washington, D.C., 20230, by referring to the file number assigned each opportunity. Brochures, if available, will also be supplied upon request.

A new development in fixing techniques eliminating pre-drilling and pre-punching for insertion and securing, by mechanical means, of a range of components directly into metal plates or laminates is offered to U.S. firms. The result is a perfect fit according to the manufacturer. The tooling involved is simple and can be used on standard hand and power presses.

The techniques offered allow for insertion of a relatively hard object through a sheet of material which is softer or vice versa. The mounting of standard electronic components such as resistors, diodes or transistors on a printed circuit board are involved.

The firm claims that consistently good electrical joints are achieved by the mechanical nature of these techniques, which require less skill than conventional methods. There are any number of other applications claimed for this technique. **File 1255.**

U.S. licensee is sought for production of a new electrical remote-reading (spirit) level which can supplement or replace the conventional spirit level in engineering applications.

The principle of the electrolevel had been derived directly from the spirit level. A glass vial, with its upper surface ground to a uniform radius, is provided with three electrodes and is partly filled with an electrically conducting fluid. Movement of the bubble changes the resistance values of the electrical paths between the electrodes, which are converted to the movement of an instrument pointer by a simple electrical bridge circuit.

The firm states that this form of construction for a level-sensitive instrument is superior to any mechanically-pivoted pendulum device because of its robustness, compact dimensions, and freedom from wear. It can be mounted in remote or hazardous situations, can be totally isolated from thermal changes which seriously affect sensitive spirit levels, and provides a reading from a pointer-type instrument needing no mental averaging calculations.

The electrolevel has many applications for which the limitations of a spirit level are unacceptable and where remote readings are a major asset, such as: deflection tests in structures; theodolite levels reading to single seconds of arc; subsidence monitoring for large structures; and gradient measurement in trenches and drails. **File 1256.**

A firm accounting for 80% of all vacuum metallizing plant installations in the U.K. is interested in licensing a U.S. manufacturer to produce its equipment.

The firm produces a wide range of equipment covering all aspects of vacuum metallurgy including the mass production metallizing of large mouldings. It has in production a number of vacuum furnaces for various processes including brazing, sintering, heat treatment, refining and many special applications to suit a customer's specific requirements. **File 1257.**

A license is offered for U.S. production of a device to detect overload on chain and belt drives. The mechanism, patented in the U.S. applied as a safety device, enables an operator to stop an overhead conveyor from a remote location in case of emergency, or the device can be adjusted to automatically stop the conveyor and sound an alarm.

The device which makes this possible employs a toggle linkage to measure the tension in the tight side of the input chain drive. Any increase in tension over the normal causes a jockey pulley, mounted at the junction of the toggle links, to deflect outwards causing a micro-switch to be actuated.

Advantages of this device are that it is easily made, adjusted and, in the case of a conveyor application, virtually trouble-free. Also, the angular movements of the various links are so small that there is practically no wear and unlike mechanisms employing the axial displacement of 2 springloaded cam faces opposed on a coaxial shaft arrangement, it is unaffected by slight changes in the coefficient of friction due to lubricant temperature. **File 1258.**

Manufacturer of electro-mechanical torque motors offers a license covering know-how for the production of its motors. These torque motors can be used in the aircraft and machine tool industries. They may also be utilized in wire contact relays and patchboard and card readers. **File 1259.**

U.S. licensees are sought to produce and market a new type of connector designed for making a tight seal between ceramic water closet and soil pipe of any material. The connector is moulded from plasticized PVC and can be fitted by unskilled labor without special tools in 4-5 minutes. The device is reported to be in wide use in the U.K. and Europe. A patent has been applied for in the U.S. **File 1260.**

Marine engineering firm seeks U.S. licensees to produce its rotary engines designed for marine and automotive use. These are diesel turbine, high speed, proportional engines. **File 1261.**

Licenses, Joint Venture Sought

351 Motors

Manufacturer of aircraft electric motors seeks licensing arrangement with U.S. manufacturer of Servo mechanism, similar specialized motors. Vactric Control Equipment, Garth Rd., Morden, Surrey. IR 133.

353 Conveyors

Precision and general engineering firm seeks license to make all types of mechanical handling equipment, particularly screw, vertical, trolley, vibrating, pneumatic conveyors. Speedy & Eynon, Ltd., 67-69 Warstone Lane, Birmingham 18. IR 2.

354 Power Tools

Manufacturer of maintenance equipment, industrial blowers interested in complementnig its product line by seeking license to manufacture a line of portable electric tools with 1½ hp. motors. Martindale Electric Co., Wembley, Middlesex. IR 198.

356 High Vacuum Production

High vacuum research, production firm interested in license for manufacturing various types of high vacuum production equipment for coating units in metal, glass, paper, textile surfaces. Vacuum Industrial Applications, Ltd., Netherton Rd., Wishaw, Lanarkshire, Scotland. IR 56.

358 Refrigeration Equipment

Commercial refrigeration and food units manufacturer seeks licensing arrangements in U.K. for commercial refrigeration food units in all commercial use areas, retail store outlets, home refrigeration, deep freeze units. Harris & Sheldon Lighting, Ltd., 180 Aston Hall Rd., Birmingham. IR 21.

362 Controls

Manufacturer of voltage regulator for power systems seeks license to manufacture control devices for use on electric power applications—thyristor controllers, high accuracy magnetic amplifier controllers, controllers for use with variable speed motor drives. Brentford Electric, Ltd., Mann Royal, Crawley, Sussex. IR 103.

Manufacturer of test equipment, marine communication gear, seeks license to manufacture industrial control equipment, particularly those applying to machine tools. Electro Mechanical Controls, Ltd., 6 Alpha Rd., Teddington, Middlesex. IR 137.

366 TV Equipment

Magnetic tape recorders, closed circuit TV manufacturer seeks license to make closed circuit TV documentation reader (up to 3′ x 4′ in size, for maps) and for military applications, inexpensive video recorders for small studios, teaching aids. Epsylon Industries, Ltd., Feltham. IR 171.

367 Electronic Components

Manufacturer of precision potentiometers and aircraft control equipment seeks license to produce conductive plastic potentiometers, solid-state high current relays, servo components. Teddington Aircraft Controls, Ltd., Merthyr Tydfil, Glamorgan, Wales. IR 151.

License sought to produce transducers for automatic industrial control applications to include stripchart recorders, hydraulics, pneumatic devices, closed loop instrument devices, digital, analogue converters, A/D converters. Hunting Engineering Group, Ltd., Field Services, (Aircraft), Ltd., Reddings Wood, Ampthill, Bedfordshire. IR 117.

Manufacturer of computers, power transformers, measuring equipment interested in licensing, joint venture in U.S. for production in microwave, instrument fields. Ferranti, Ltd., Crewe Toll, Ferry Rd., Edinburgh 5, Scotland. IR 63.

Producer of tungsten carbide tooling for wires, tubes, bars, seeks to manufacture under license ferrite cores, ferrite core planes for computer memories. Anglardia, Ltd., (Sir J. Farmer Norton & Co.), Adelphi Ironworks, Salford 3, Lancs. IR 175.

Digital equipment manufacturer seeks license to make digital electronic equipment for process industries and on-line quality analyser for process industries. Mimic Diagrams, (Electronics), Ltd., Maxim Rd., Crayford, Kent. IR 113.

Manufacturer of automatic filling equipment for food packaging seeks license to make electronic weighing heads which could be applied to small weights from 5 gr. to 5 lb. Messrs. Southall & Smith, Ltd., Villa St. Works, Hockley, Birmingham. IR 38.

Varied products

Manufacturer of digital equipment wants to expand line by making U.S. items under license such as analogue to digital, D to A and serializing devices. It is also interested in being licensed to produce double ended operational amplifiers for use with level transducers. British Aircraft Corp., Industrial Products Div., Filton House, Bristol. IR 53.

Manufacturer of automatic washing equipment for railroad cars, locomotives, buses, other vehicles, seeks to expand operation to include washers for private cars on cross-licensing basis. Also interested in small farm machinery on same basis. Smith Bros. & Webb, Ltd., 261-271 Stratford Rd., Birmingham 11. IR 24.

Precision pressings firm interested in producing under license computer patch boards; printed circuit edge connectors; tube holders; small plugs, sockets. Latham Mfg. Co., Ltd., 4 Ablewell St., Walsall. IR 25.

Manufacturer of hydraulics, gear boxes seeks supply lines through license to manufacture transmissions for auto, marine, tractors; seeks modulating pumps for tractors, hydraulic units, gear boxes, other vehicle components. Gresham & Craven, Walkden, Manchester. IR 23.

Firm specializing in magnetic engineering of all sorts seeks U.S. licenses in magnets fields, particularly in magnetic memory engineering, manufacturing. Newport Instruments, (S. & M.), Ltd., Colquhoun House, Broadwick St., London, W.1. IR 200.

Medical electronics firm seeks license from U.S. manufacturer of cryogenic cooling equipment or instruments used in such systems, medical instrumentation, particularly pathological types. De la Rue Frigistor, Ltd., Canal Estate, Station Rd., Langley, Bucks. IR 193.

Seeks license to make a line of inverters and/or regulated power supplies of sophisticated design; would like to manufacture under license or joint venture U.S.-designed line of medical instrumentation. Cinetronics, Ltd., Allum Lane, Boreham Wood, Hertfordshire. IR 89.

Control instrumentation firm seeks license to make environmental test equipment for laboratories; vibration, shock, temperature, vacuumed engineered devices. Ultra Electronics, Ltd., Western Ave., Acton, London W.3. IR 84.

Seeks license in rubber, plastics products field, specifically in laminates, copper clad laminates, industrial electrical plastics, mechanical plastics, rubber sheets, clothing, footwear. IOCO, Ltd., Netherton Works, Glasgow, W.3. Scotland. IR 64.

Producer of computers for military and industrial markets seeks joint venture with U.S. firm for producing hybrid or analogue systems for industrial markets in U.S. Firm also interested in transistorized amplifier with a computer accuracy of .01%. Short Bros.-Harland, Ltd., (Precision Engineering Div.), Belfast, Ireland. IR 102.

Manufacturer of data loggers and recorders for atomic power plants, and electronic railway signalling equipment, seeks U.S. licenses for industrial digital data processing, control equipment of advance design. Hawker Siddeley Dynamics, Ltd. (Industrial Electronics Div.), Whiteley, Coventry, Warwickshire. IR 79.

Firm engaged in research, development for government work, plans to diversify into industrial applications; seeks license arrangements with U.S. firms in field of industrial and electronic weighing machines for food, packaging industry; electronic automatic control equipment for warehousing, conveyor belts, production control systems. Hunting Engineering Group, Hunting Engineering, Ltd., Reddings Wood, Ampthill, Bedfordshire. IR 116.

Niger businessman asks bottling license

A business and trucker in the Republic of Niger, who took over a small bottling plant last year, wants to bottle and distribute a soft drink under license of a U.S. manufacturer. He is a member of the local government committee and is regarded as an energetic businessman.

Write: (preferably in French), Nayache Abdou, Boite Postale 60, Maradi, Niger.

Indian industrialists ask private U.S. help in setting up plant

Firm to produce steel castings for railways, industrial gear

A group of Indian industrialists seeks private U.S. collaboration in establishing a plant for the manufacture of 3,000 metric tons annually of steel castings.

The plant will be at Nara, approximately 125 miles from Delhi.

A total financial outlay of $2.1 million is contemplated, $1.7 million of which will form the rupee component and the balance the U.S. dollar component, inclusive of cost of machinery and technical know-how.

The firm already has obtained an industrial license for the project from the Indian Government. The company proposes to produce castings for the railways and heavy and light industrial machinery. An annual profit of over $500,000 on invested capital is projected, subject to taxes ranging from 50 to 60%.

Consumption of locally made castings has increased from 29,000 tons in 1959 to 47,500 tons in 1963. Approximately 60% of total requirements, however, is met by imports. According to official estimates, requirements for steel castings are expected to reach 194,000 tons in 1965/66 and 353,500 tons in 1970/71.

Write: Brahma Swarup, Chairman, Uttar Pradesh Steel Foundries, Pvt., Ltd., Sukhbir Sinha Park, Muzaffarnager, U.P., India.

Chilean firm seeks license to make wheels, radiators

A Chilean firm, exclusive representative of a well-known make of foreign cars and trucks, wants to enter into a licensing arrangement with U.S. manufacturers for the production in Chile of wheels and radiators for cars and trucks.

The company, seeing potential for growth, envisages an initial annual production of 55,000 wheels of various sizes and 10,000 radiators.

Royalty payments and compensation for technical assistance will be made upon mutually acceptable terms.

Write: Bureau of International Commerce, Office of International Investment, File 2-3714-4-B, Department of Commerce, Washington, D.C. 20230.

Investment potential seen in Malta tourist industry

The Mediterranean island of Malta affords attractive investment opportunities for U.S. private enterprise in the tourist industry, according to a survey prepared by the U.S. Consulate in Valetta.

Among the projects for which the Government of Malta is expected to call for bids in the near future are a first-class golf course and combined country-club and hotel, a centrally located hotel and office building in Valetta, and a medium-size first-class hotel on the neighboring island of Gozo.

In addition, several private development corporations are interested in obtaining participation of U.S. companies either on a financial basis or joint venture basis.

Under the Aids to Industries Law, the Government of Malta grants relief from customs duty on imported construction material and equipment and on the initial importation of operational equipment, as well as income-tax exemption for a maximum period of 10 years.

U.S. firms interested in investigating investment opportunities in Malta may obtain detailed information by writing: Malta Government Tourist Board, Valetta, Malta.

Copies of the survey prepared by the American Consulate in Valetta may be obtained by writing: Bureau of International Commerce, Office of International Investment, File IRD-S, Department of Commerce, Washington, D.C., 20230.

PACKAGING MACHINES SOUGHT

Packaging company seeks license to make packaging and wrapping machines, except food and tobacco. Write: C. V. Neli-Pak, 75, Maasheseweg, Venray, Netherlands.

LICENSING ARRANGEMENT

Manufacturer seeks licensing arrangement with U.S. manufacturer of line of check-out counters used in self service stores.

Write: Charles Hope & Co., Kingsford Smith Dr., Eagle Farm, Brisbane, Queensland, Australia.

DESIGN COOPERATION ASKED

Manufacturer of upholstery fabrics and terrycloth, is interested in agreement with medium-size U.S. manufacturer in their line of business for mutual cooperation with respect to technical and other matters, such as designing.

Write: Karlstads Spinneri & Vaveri AB, Karlstad, Sweden.

Vietnamese study team visits U.S. to promote investment

12-member group to encourage U.S. interest in industrial growth

A 12-member industry productivity study team from Viet-Nam is touring the U.S. to promote American investment in that country.

The team, which began its study of industrial plants, universities, institutions and Government bureaus June 10, will be here until August 29. It will visit major cities throughout the country in hopes of interesting the U.S. business and financial community in investment.

The group also will study industrial productivity and seek ideas and information which might be instrumental in promoting Viet-Nam's industrial growth and productivity.

The visit was organized by the Confederation of Industrialists of Viet-Nam under the auspices of the Agency for International Development.

Cross section of industry

The team is composed of top executives representing a cross section of manufacturing industries currently operating in Viet-Nam.

The visitors hope to have exploratory discussions with U.S. businessmen on possible interests in capital investment, physical plant and technical services which might contribute to expansion of industry.

The team already has visited New York, Boston, Philadelphia and Pittsburgh and will go to Battle Creek and Kalamazoo, Mich, Chicago, Milwaukee, San Juan, Atlanta, West Point and Washington, D.C.

It is accompanied by Victor Kovanich, an officer of the Agency for International Development.

Firms interesting in meeting with the study team should contact M. H. Prang, Chief, Industry Team Section, Office of International Training, Agency for International Development, 185 BH, Washington, D.C., 20523.

GAS HEATER LICENSE

Licensing rights sought for the manufacture of gas-room heaters. Write: R. S. Stokvis & Zonen N.V., P.O. box 426, Rotterdam, Netherlands.

Indian food company seeks U.S. partner

U.S. capital in the amount of $420,000 mainly in the form of machinery, equipment and technical know-how is being sought by a long-established Indian food-processing firm to help launch a $2.1 million plant to process and can fruits, vegetables, juices, syrup and ketchup.

The firm recently obtained approval of the Indian Government for the project.

Plans call for the establishment of the plant near New Delhi. It would be designed initially to process and can 6,000 tons of various fruits and vegetables a year. Estimates indicate 80% of output would be marketed domestically and 20% exported. Potential demand in India for these products at the present time is estimated at 100,000 tons a year.

For a copy of a detailed project report prepared by the promoters write: Bureau of International Commerce, Office of International Investment, File 4-2033-9-H, Department of Commerce, Washington, D.C., 20230.

Bid deadline extended for Colombia slaughterhouse

The deadline for bids on a contract to operate the new municipal slaughterhouse of Barranquilla, Colombia, has been extended to 5:00 p.m., July 21.

Bids, which must be accompanied by a performance bond or bank guaranty in the amount of about $2,500, must reach the Empresas Publicas Municipales, Calle 32 No. 44-64, Apartado Aereo No. 321, Barranquilla, Colombia, by that time and date.

For a copy (in Spanish) of the terms and conditions of the contract, write: Bureau of International Commerce, Office of International Investment, File 2-2011-7-B, Department of Commerce, Washington, D.C., 20230.

TRANSFORMERS WANTED

Licensing agreement is sought with U.S. firm for manufacture of small capacity transformers, particularly those with capacity of up to 2,000 kva, 33 kv.

Write: Dickson Primer & Co., Pty., Ltd., G.P.O. box 3880, Sydney, New South Wales, Australia.

COSMETICS LICENSE ASKED

Netherlands firm, engaged in manufacture of latex, rubber and plastic foam, is interested in receiving licensing rights for manufacture of cosmetics. Write: Arthur Ulbrich & Co., 3e Kostverlorenkade, Amsterdam.

Indian ceramics firm seeks joint venture to make machinery

Project approved by Indian Government to cost $4.2 million

An Indian firm, engaged since 1914 in the wholesale of refractory and insulating materials and ceramic-making machinery, proposes a joint venture to U.S. firms for the manufacture in India of ceramic-making machinery.

The U.S. firm should have technical know-how as well as capital.

The project, for which the Indian Government has issued the requisite industrial license, would require a capital outlay of the equivalent of $4.2 million. U.S. participants ordinarily would be expected to subscribe to the stock issue to the extent of the cost of imported machinery and equipment and the value of technical assistance provided. The firm however is willing to discuss financial arrangements, including forms of capital participation.

Among the machinery proposed for manufacture are hydraulic and vibrating brick-presses, roofing-tile presses, muller mixers, pan mills, ball mills, press feeders, kiln and dryer cars, and diaphragm pumps. Except for stainless steel, alloy steel and some basic components which would have to be imported, the principal raw materials required—iron, steel structurals, plates and sheets, steel scrap, coal and limestone—are available locally. The firm envisages a total production of $12.6 million worth of machinery,

Write: Vasdeo Gidwaney, Gidwaney Bros., 73 Netaji Subhas Rd., Calcutta 1, India, who has indicated he is prepared to visit the U.S. to negotiate with interested U.S. ceramic firms.

The Bureau of International Commerce, Office of International Investment (IRD-H), Department of Commerce, Washington, D.C., will be pleased to render all appropriate assistance upon request.

Industrial ventilating gear requested by Mexican firm

A small but growing Mexican firm, engaged since 1960 in the engineering and manufacture of industrial ventilation systems, wants to enter into either a licensing arrangement or a joint venture with a U.S. firm having technical know-how for the manufacture of equipment used in industrial ventilation systems.

The firm, owned by 2 engineers with considerable experience in the field, has developed a market for industrial ventilation systems designed to capture dust or gases at high temperatures in the states of Nuevo Leon and Coahuila. It is the only firm in its line now selling to the industrial areas of Monterrey, Monclova and Torreon.

Sales for 1963 amounted to the equivalent of $184,000 and are expected to reach around $320,000 this year. The firm recently began to manufacture a line of industrial mechanical sweepers which are reported to be selling well.

Write: Guillermo Cordoba, Katoh Mexicana, S.A., Monterrey, Mexico.

COMPONENTS' PRODUCTION

Joint venture or licensing arrangement sought to produce components for radio, television and other electronic equipment. The firm is particularly interested in making printed circuits and all types of capacitors.

Write: Mr. P. Kingo-Pedersen, P. Kingo-Pedersen Electronics, 3 Falkoner Alle, Copenhagen F., Denmark.

U.S. LICENSING RIGHTS

Manufacturer of reagents for water treatment seeks U.S. licensing rights for the production of reagents for water and fuel treatment.

Write: ERPAC, S.A., 9 rue Auguste-Barbier, Paris 11e, France.

JOINT VENTURE REQUESTED

Producer of water softeners, dryers, and filters seeks joint venture or licensing arrangement to manufacture industrial, commercial and household air-conditioning equipment. Write: Baume-Marpent et Thirion Reunis S.A., 249 Chaussee de Vleurgat, Brussels, Belgium.

PRINTING EQUIPMENT

Small well-established engineering firm handling medium sized equipment for the printing and allied trades, is interested in licensing arrangement with U.S. company for manufacture of equipment for the printing and packaging industries.

Write: G.F. Farr & Sons, Ltd., Collingdon St., Luton, Bedfordshire, England.

U.S. CHEMICAL FIRMS

Chemical manufacturer and refiner is interested in hearing from U.S. industrial chemical companies who may be seeking licensees in United Kingdom. Write: British Tar Products, Ltd., Hayes Rd., Cadishead, near Manchester, England.

Bid deadline extended for Brazilian gas concession

The Municipality of Sao Paulo, Brazil, has extended to 4:00 p.m., September 12, the deadline for submission of bids on the 30-year concession for the production and distribution of manufactured gas. (See INTERNATIONAL COMMERCE, April 27, p. 30).

The original deadline was June 12. The successful bidder will be required to expand current production and distribution facilities and provide a minimum of 13,000 new connections a year. There are at present nearly 105,000 consumers of manufactured gas out of a total population of some 4 million.

Bids, which may be either for production or distribution, or both, should be submitted to Departmento do Expediente e do Pessoal, Rua Senador Queiroz 305, 12° — andar, sala 1, Sao Paulo, Brazil.

To obtain an outline of specifications and requirements, write: Bureau of International Commerce, Office of International Investment, File 2-3312-6-B, Department of Commerce, Washington, D.C., 20230.

Cinema project in Uganda proposed as joint venture

A 30-acre site on the outskirts of Kampala, Uganda, has been acquired under a 99-year lease for the erection of a drive-in movie and recreation center.

The promoters, who envisage a total investment of around $240,000, seek a U.S. firm with know-how willing to invest up to approximately $160,000 in the project on a joint venture basis. A 20% return on invested capital is anticipated.

When completed, the drive-in will be the only open-air movie in Kampala. Motion-picture projectors and electronic equipment would have to be imported from the U.S.

Write: C. S. Gheewala, Kampala Drive-In Cinema, Ltd., P.O. box 3450, Kampala, Uganda.

WATER EQUIPMENT SOUGHT

License sought from U.S. firm in the water recovery field for the manufacture of equipment for purification of contaminated sea water.

The firm now manufactures oil and gas fired packaged boilers and industrial electric furnaces under licensing agreements from 2 major U.S. corporations.

Write: G. W. B. Furnaces, Ltd., P.O. box 4, Dibdale Works, Dudley, Worcestershire, England.

Pakistan seeks variety of telephone, telegraph equipment and machinery

The Purchase Coordinating Officer, Telegraph & Telephone Directorate General, Block No. 48-A, Pak. Secretariat, Karachi, has issued tender PUR.13-22/63/569 which calls for telephone and telegraph equipment.

Bid deadline is July 25 for the following:

Full wave metal rectifier input 220v, 50 c/s output, 90v, 10 amp., d.c.;

Diesel generator sets: one for 3 phase, 400/230v, 50 c/s, 25 kva, 1500 r.p.m., water cooled with auxiliary parts and one set for 230v, 50 c/s, 5 kva, 1000 r.p.m., water cooled, with auxiliary parts;

One acid mixing tank 30″ x 18″ x 24″ (any make);

Two bridge meggers 500v, 100 megohms with decade resistance 1-9999 ohms and ratio dial for 1/1, 1/10, 1/100, 10/1 and 100/1 ratios;

Two multimeters 0-10 amp and 0-1000v in at least 4 ranges each a.c. and d.c. and 0-100,000 ohms in 3 ranges, sensitivity 20,000 ohms/volt accuracy, plus or minus 1%;

Three telegraph typewriters (Underwood U.S.A.);

One sound film projector 16MM (B&H) model 642 with speaker and screen;

One epidiascope 230v, 50 c/s, single phase, 1000 watt max., projection 6″ x 6″ slide;

Two vacuum cleaners;

Two electric drill machines with 4 sets of bits, up to ¼″ (hand model); and 20 head gear sets and 20 electric soldering bolts 220v, 60 watt, 50 c/s.

Quantities shown are approximate and may be modified when order is placed. Bidders should quote on a unit basis and be prepared to accept an order for either one, several or all items in the inquiry.

A copy of the tender is available on a short-term loan basis to firms located in the U.S. from the Power & Electrical Equipment Division, BDSA, Rm. 4124, Washington, D.C. 20230. Telephone: 202-WO 7-4242.

Ecuador seeks financing, construction bids on bridge

The Guayas Road Commission, Box 4132, Guayaquil, requests that firms who are interested in participating in bidding on the construction and financing of the Rio Guayas Bridge over the Daule and Babahoyo Rivers submit by July 31 their qualifications and include references and information concerning similar works which they have constructed and financed.

Bid deadline extended

The Department de Bienes Nacionales, Licitaciones y Asuntos Alemanes, 3a. Calle 3-49, Zona 1, Guatemala City, Guatemala, has extended the bid deadline for one steel, horizontal firebox boiler from July 15 to July 23. The Tender No. is 25-64. (INTERNATIONAL COMMERCE, July 6, p. 70, SIC 343).

Iraq announces prizes for design competition

The Municipality of Baghdad, Iraq, has announced an international prize competition for the design of pedestrian and vehicular tunnels and related facilities at South Gate, the "Times Square" of Baghdad. A prize of ID 1,500 ($4,200) will be awarded for the offer winning first prize, and ID 750 ($2,100) for the second prize.

A consulting engineering firm, to be eligible for participation, must have designed and supervised similar projects.

Offers are to be submitted to the Lord Mayor, Baghdad, before September 1.

A sketch of the Square and its approaches and a copy of the announcement may be seen at the Water Industries & Engineering Services Division, Rm. 4111, Department of Commerce, Washington, D.C. Telephone: 202-WO 7-4346.

SHAPE wants 135 telephones, 30 desk-type telephone sets

The Supreme Headquarters Allied Powers Europe (SHAPE) has invited bids for 135 field type telephones and 30 desk-type commercial telephone sets.

The 135 telephones should be suitable for use as a lightweight military field telephone and as a lineman's telephone under conditions unsuitable for a standard commercial table telephone set.

The 30 desk-type telephone sets (Standard CB Automatic Telephone Set) are to be in accordance with CCITT recommendations.

All bids must be in possession of the SHAPE Purchasing and Contracting Officer, ACE Communications Electronics Equipment, Communications & Electronics Division, Paris, France, before Aug. 3.

A copy of the Invitation to Bid (No. 64-13) and the specifications are available on 3-day loan from BDSA's Trade Opportunities Staff (111), Department of Commerce, Washington, D.C. 20230. Requests should be marked "SHAPE-64-13" and include a pre-addressed mailing label.

Bids on highway invited

The Direction for Construction of the Adriatic Highway, Belgrade, Yugoslavia, invites international competitive bidding for construction of the 23-mile highway section known as Kamenari-Kotor-Lepetane.

Bid deadline is July 27.

This is the second invitation to participate. The previous invitation was cancelled because all tenders exceeded the estimated value of U.S. $1.7 million.

Copies of the Invitation and General Technical Document are available on loan to firms located in the U.S. from the Building Materials & Construction Industries Division, BDSA-306, Rm. 4012, Department of Commerce, Washington, D.C. 20230. Telephone: 202-WO 7-3601.

Communication systems planned by Turkey; equipment bids wanted

Turkey plans to install communication systems which include FSK, MF, and HF equipment at several shore stations.

Tenders should be submitted to: PTT Genel Mudurlugu, Malzeme Dairesi Baskanligi, Ankara (General Directorate of PTT Supply & Procurement Dept.).

Equipment called for and bid deadlines are:

Radio telegraph transmitters for Istanbul: FSK telegraphy F1 and 4 frequency channel duplex telegraphy, FW 4-20 mcs at 3-5 kw (F-1) and 10 kw SSB; bid deadline July 24;

One MF transmitter for Izmir shore station: A1, A2 415-525-kcs, 1-2 kw; bid deadline July 27;

Four radio telephone receiver sets for Izmir and Samsun shore stations: A3 and SSB 1625-23000 kcs; 4 mv signals at s/n of 10 db; bid deadline July 31;

One HF trausmitter for Samsun shore stations: A3 and SSB 1625-23000 kcs, 300-500 W PEP; deadline August 3;

Two double diversity telegraph receiver systems for Yesilkay: F1 and F6, 3-26 mcs, AGC, AFC distortion no greater than 1/1000; bid deadline August 5.

Copies of the tender are available from the firm of Modern Tercume Burosu, Menkse Sokak 20/7 Ankara, Turkey (cable Mondial-Ankara) at a charge of TL 55 ($495) per copy.

A copy of each tender is available on loan to firms located in the U.S. from the Electronics Division, BDSA-308, Department of Commerce, Rm. 4117, Washington, D.C. 20230. (Telephone: 202-967-4036.

Uruguay invites bids on tractors, weed burners

The Ministerio de Obras Publicas, Seccion Licitaciones, Ave. 18 de Julio 1112, Montevideo, invites bids on 15 diesel wheel tractors of 50 h.p. and 2 gasoline motor driven weed burners.

Bids are invited from firms legally established in Uruguay. The bid deadline is about August 24. Correspondence is preferred in Spanish.

Copies of each bid form are available in Spanish to firms located in the U.S. from the Agricultural, Construction, Mining & Oilfield Equipment Division, BDSA-320, Department of Commerce, Washington, D.C. 20230. Telephone: 202-WO 7-4319.

Ceylon extends bid deadline

The Dept. of National Housing, Colombo, Ceylon, has extended the bid deadline for the design and construction of 5,000 low-cost flats or apartments in Colombo and suburbs from June 16 to August 4. (INTERNATIONAL COMMERCE, May 11, p. 23).

Tenders for office supplies requested by New Zealand

The Government Printing Office, Wellington, has invited bids on a variety of office supplies. Tender No. 1094 includes, but is not limited to, the following:

Pencil sharpeners, stapling machines, letter and parcel scales, numbering machines, drafting instruments (such as rulers, protractors, compasses, and dividers), pencils, erasers, artists' water colors, ink, and paper.

Bid deadline is noon July 29.

Copies of the specifications are available from the New Zealand Senior Trade Commissioner, 1145 19th St., NW., Washington, D.C. 20036. Telephone: 202-FE 8-8820.

Korea seeks coal tar pitch, antimony metal, draft gear

The Korean Government's Office of Supply has invited bids for several products including:

Coal tar pitch 19,194 m.t.; antimony metal 3.5 m.t.; and rubber draft gear for passenger cars, 206 items. The tender No. is KFX-4045-N and the bid deadline is 2 p.m. July 20.

Bid documents are available on loan to firms located in the U.S. from: Chemicals and Allied Products Division, Rm. 4411, BDSA, Department of Commerce, Washington, D.C. 20230. Telephone: 202-WO 7-3512.

Mozambique changes deadline

The Mozambique Administration of Harbors, Railways & Transport Service has extended the bid deadline on its tender for a refrigeration plant in the Port of Beira from June 29 to July 29, and also has made several amendments which are available on a short term loan basis to firms domiciled in the U.S. from the G.I.E.C. Division, BDSA-323, Department of Commerce, Washington, D.C. 20230. Telephone: 202 WO 7-5589. (INTERNATIONAL COMMERCE, April 6, p. 43; and May 11, p. 23).

El Salvador needs lighting equipment for new system

San Salvador is initiating plans to install a complete new city lighting system. The type of lights to be installed, either fluorescent or mercury, is still undecided.

The supplier is expected to offer payment terms of two to three years and to supply the specifications as to what equipment will be needed.

Libya extends bid deadline

The Embassy of Libya has announced the deadline extension to July 20 for construction of the 50-bed hospital at Tarhuna, Libya, to obtain necessary subcontractor bids. (INTERNATIONAL COMMERCE, May 18, p. 27).

Greece extends bid deadline

The Hellenic Telecommunications Organization, Athens, has extended the bid deadline for the supply of 2 semi-automatic telegraph exchanges from June 30 to July 31. (INTERNATIONAL COMMERCE, June 1, p. 30, under 366 Communication Equipment.)

The firms and individuals in the following lists are interested in trade relations with U.S. businessmen. The commodities in which they have expressed interest are indicated by the numbers preceding the commodity classifications. These numbers refer to the Standard Industrial Classification (SIC) Manual, which is available for $2.50 a copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Every effort is made to include only firms or individuals with good reputations. However, the Department of Commerce cannot be responsible for negotiations resulting from these contacts.

The listing in INTERNATIONAL COMMERCE of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the U.S. Department of Commerce pursuant to the U.S. Export Control Act. For applicable export licensing regulations and policies, see the Comprehensive Export Schedule or consult the Bureau of International Commerce's Office of Export Control or any Department of Commerce Field Office.

● indicates that the trade opportunity represents a request for bids by a foreign government agency. A (★) following indicates that additional information may be borrowed by U.S. firms in this country from BDSA; telephone numbers indicated. To avoid delay, requests for loan material should include country and commodity.

★★ indicates opportunities obtained by U.S. trade missions to other countries. A (★) following these indicates that additional information may be obtained by writing Commodity Export Promotion Staff, BDSA-111, Department of Commerce. The I.R. (interview report) number is requested in correspondence. NCIA following indicates no commercial information available.

WTD indicates that a World Trade Directory report is available on the foreign firm for which the trade opportunity is listed. These reports, indicating type of organization, sales territory, size of business, sales volume, trade and financial reputation, and other factors, are available for $1 each from the Commercial Intelligence Division, Bureau of International Commerce (BIC), Department of Commerce, Rm. 6059 B. Telephone: 202-WO 7-4203. The date following the letters WTD refers to the date of issuance of the report.

Leads for Exporters

Listed below are companies interested in buying U.S. products. Direct purchases are wanted unless otherwise indicated. Approximate foreign tariff rates and customs applicable to the products listed below may be obtained from the Department of Commerce or the Department of Commerce field offices.

013 Livestock Farms

BELGIUM—Chinchillas. Robert Dhondt (farmer, breeder), 19 Vossenstraat, Melle.

200 Food

SOUTH AFRICA—Delicatessen products, all kinds; nuts in tins, packets. Direct purchase and agency; requests replies from manufacturers only. Hill House Trading (Pty.) Ltd. (importer, distributor), P.O. Box 2780, Cape Town. WTD 6/5/64.

201 Meat Products

MALAYSIA—Chicken wings, large size; chicken drumsticks; whole chickens. Requests replies from suppliers, quotations cif Singapore. Prices must be competitive. Interstate Co. (importer, wholesaler), 9-11 Meyer Chambers, Raffles Place, Singapore 1.

202 Dairy Products

PAKISTAN—Condensed milk. Gosien & Co., 4-B Shahalam Market, Lahore. WTD 6/15/64.

203 Canning, Preserving Foods

GERMANY—Delicatessen food specialties, canned or bottled, all sorts of snacks and coffee in cans. Exclusive distributorship or agency representation within the Federal Republic of Germany and West Berlin. WEMPA Weltmarken-Import G.m.b.H., Stielstrasse, 62 Wiesbaden-Schierstein. WTD 6/12/64.

NETHERLANDS—Canned fruits, foodstuffs; seek contacts with canners in U.S. Firma H. Barends (importer of prepacked foods, specialties), Hooikade 58, The Hague. WTD 10/23/63.

SOUTH AFRICA—All kinds of canned foodstuffs; requests offers, quotations for direct purchase from canners only. Also interested in exclusive agency for South Africa. Hill House Trading (Pty.) Ltd. (importer, distributor), P.O. Box 2780, Cape Town. WTD 6/5/64.

204 Grain Mill Products

FRANCE—Granulated oyster shells, powder nr 00, containing 320 gr. calcium per kilo. Requests replies in French. Direct purchase and agency. Exploitation Huitriere de Saint-Michel-en-l'Herm (manufacturer), 23 Rue Réaumur, La Rochelle (Charente Maritime).

207 Confectionery

FRANCE—Candy bars. Direct purchase and agency. Georges Moreau (sales agent), 55 Bld. de Sébastopol, Paris 1er. WTD 11/19/63.

SOUTH AFRICA—Confectionery, all types.

Direct purchase and agency; requests replies from manufacturers only. Hill House Trading (Pty.) Ltd. (importer, distributor), P.O. Box 2780, Cape Town. WTD 6/5/64.

209 Food Preparation

BELGIUM—Dietetic foods, all kinds. Requests replies from manufacturers. Comptoir Chimico Pharmaceutique (importer, distributor), 1001 Chaussée d'Alsemberg, Brussels. WTD 5/17/63.

PAKISTAN—Tallow, grease, inedible. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Instant coffee makers for hotel or motel room installations. Agency. Maurice Blair, self-employed, Maurice Blair, 25 South Lodge, Grove End Rd., London, N.W. 8, England. NCIA. I.R. 179.

210 Tobacco Manufactures

SOUTH AFRICA—Cigarettes, cigars. Ch. Abelsohn (Pty.) Ltd. (importing distributor), 26 Sir Lowry Rd., Cape Town. WTD 6/15/64.

220 Textile Mill Products

ENGLAND—Nylons, dacrons, rayons, cottons, for manufacture of ladies' blouses, children's wear. Marson Fabrics Ltd., Threeways House, 40-44 Clipstone House, London, W.1. WTD 6/16/64.

SOUTH AFRICA—Piece goods: sheeting, curtaining, household linens; arnel and cotton dress materials; requests replies from mills only. Alexander Sagov (Cape) Ltd. (importing distributor), 34/36 Buitenkant St., Cape Town.

★★ UNITED KINGDOM—Trade Mission

Fabrics for ladies' outerwear. Agency. Benson & Lynn (manufacturer), 37 Mitchell St., Glasgow, C.1, Scotland. NCIA. I.R. 41.

Fabrics to be used in manufacture of products by rubber industry (tires, conveyor belting, drive belts, rubberized footwear, aprons, gloves). Manufacturer. T. Hennessey, Managing Director, Hay & Robertson Ltd., P.O. Box 25, St. Margaret's Works, Dunfermline, Scotland. I.R. 48.

221 Broad Woven Fabric Mills, Cotton

● **IVORY COAST**—Miscellaneous articles of wearing apparel; white drill; colored drill. Tender No. 1901/DSN/M (in French), bid deadline July 28 at 12 noon. Bids must be submitted through a representative located in Abidjan. Ministére de L'Interieur, Direction des Services Administratifs et Financiers, B.P. 1717, Abidjan.★ (Telephone: 202-WO 7-5469).

● **THAILAND**—Filter cloth, 42″ wide, weight about 620 grams per sq. meter, for filtering sugar cane, 6,000 meters. Bid deadline July 23. Tender forms and specifications obtainable for Bht. 20.00 ($1) per set from National Economic Development Co. Ltd., 43 Soi Rajkroo, Bangkok.

222 Broad Woven Fabric Mills, Manmade Fiber, Silk

DENMARK—Printed nylon or Orlon lining materials for women's raincoats, in ocelot, zebra, snakeskin patterns, "true-to-nature" colors. Jørgen Moe & Co. A/S (importer, manufacturer), 8 Kronprinsessegade, Copenhagen K. WTD 5/31/63.

FRANCE—Silk, cotton, one color or printed, mixed cotton fabrics, synthetic fiber, Terralyn, Arnel. If prices are competitive would order substantial quantities, particularly interested in medium, high price qualities. J. Tiktiner, 55 Promenade des Anglais, Nice. WTD 6/10/64.

224 Narrow Fabrics, Other Smallwares Mills

FRANCE—Laces for shoes. Direct purchase and agency. Requests replies in French. S.A. Bec—Bezombes & Comont (wholesaler), 42 Rue de la Roquette, Paris 11e.

NORWAY—Florists' ribbons, other florists' accessories. Halvdan Nielsen A/S (importing wholesaler), 8 Ryensvingen, Manglerud, Oslo. WTD 6/2/64.

225 Knitting Mills, Products

FRANCE—Women's stockings. Direct purchase and agency. La Manufacture du Bas (importer, dealer, agent), 98 Rue La Boétie, Paris 8e. WTD 4/29/64.

NORWAY—Knitwear for women, children. Rowde & Co. A/S (manufacturer), Gronvold Alle, Oslo. WTD 6/2/64.

SOUTH AFRICA—Women's, men's, children's knitwear of woolen and synthetic fibers; requests replies from mills only. Alexander Sagov (Cape) Ltd. (importing distributor), 34/36 Buitenkant St., Cape Town.

228 Yarn, Thread Mills, Products

ECUADOR—Wool yarns for sweater knitting mill; requests replies in Spanish. Fabrica "Mellizas" S.A. (manufacturer), Calle Garcia Moreno N. 646, Quito.

GERMANY—Yarns, all types, for weaving and knitting mills, hosiery manufacturers. Requests replies from manufacturers only with price quotations cif Hamburg or Bremen. Direct purchase and agency. Ernst Ludwig & Co., 791 Neu-Ulm/Donau, Max-Eyth-Str. 33. WTD 6/15/64.

229 Textile Goods

BELGIUM—Textile waste, especially cotton. Ets. Glorieux S.A., (dealer), Chaussée d'Audenarde, Herinnes, Tournai.

230 Apparel

ENGLAND—Jeans, for men, women, children. Direct purchase and agency. H. Kaye & Co. (London) Ltd., 64/66 Old St., London, E.C.1. WTD 6/16/64.

233 Women's, Misses', Juniors' Outerwear

BELGIUM—Women's dresses, all types. Direct purchase and/or agency. Matadam S.P.R.L. (manufacturer), 30 Rue Léon Frédéric, Brussels 4.

SOUTH AFRICA—Women's fashion goods: coats, suits, dresses; requests replies from manufacturers only. Alexander Sagov (Cape) Ltd., (importing distributor), 34/36 Buitenkant St., Cape Town.

239 Fabricated Textile Products

BELGIUM—Doilies for table, dresser, Usines Saint Brice S.A. (manufacturer, exporter, retailer), Les Filatures des 3 Suisses S.A., Chaussée de Lille, Orcq, Tournai.

249 Wood Products

BELGIUM—Industrial floor coverings: tile, cork. Direct purchase and/or agency. Duromit S.A. (importer, installer), 36-38 Rue de la Gare, Brussels 14.

FRANCE—Inside soles for shoes, shoe fittings, cork or similar materials; stretchers, forms. Requests replies in French. Direct purchase and agency. S.A. Bec—Bezombes & Comont (wholesaler), 42 Rue de la Roquette, Paris 11e.

252 Office Furniture

CANADA—Office furniture, wood, metal. Direct purchase and agency. Carl Israelson, President, The Rose Press Ltd., 183 Dovercourt Rd., Toronto 3, Ontario. WTD 6/16/64.

259 Furniture, Fixtures

NETHERLANDS—Buffets, back counters, serving carts, food transport systems. Direct purchase and agency. Requests replies from manufacturers only. Van Zwanenburg N.V. (importer, manufacturer, agent), 723 Weena, Groothandelsgebouw, Rotterdam. WTD 6/1/64.

264 Converted Paper, Paperboard Products

BELGIUM—Office stationery, all kinds. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

CANADA—Office supplies: stationery lines, tablets, related products. Direct purchase and agency. Carl Israelson, President, The Rose Press Ltd., 183 Dovercourt Rd., Toronto 3, Ontario. WTD 6/16/64.

NIGERIA—Gummed paper, suitable for packing wax candles. Requests quotations c.i.f. Lagos. Dee Kay & Sons (manufacturers, importers, wholesalers), 18 Ereko St., P.O. Box 2065, Lagos. WTD 6/10/64.

● **U.A.R.**—80,000 rolls glycerinated parchment paper for 5 unit code perforators. Width 11/16″, thickness .0045, 1000 ft. per roll, I.D. 2″, O.D 8″. Tender No. 23/64 M. Radio, bid deadline August 4. Assistant Director General, Telecommunications Organization, Radio Communications Administration, Opera Exchange Bldg., P.O. Box 795, Cairo. Conditions and specifications are available for review in Forest Products Division, BDSA, Rm. 4003, Department of Commerce, Washington, D.C. 20230.

273 Books

FRANCE—Scientific, technical books; eventually to be translated in French. S. A. Gauthier Villars (editor), 55 Quai des Grands Augustins, Paris 6e. WTD 10/26/64.

275 Commercial Printing

BELGIUM—Advertising novelties, in paper or light cardboard; prices $1 to $2. Direct purchase and agency. Adrian Macai (agent), 96 Rue Potagère, Brussels 3.

277 Greeting Card Manufacturing

BELGIUM—Greeting cards, all types. Dekorte P.V.B.A. (importer, distributor), Antwerpse Steenweg 100, St. Amandsberg, Ghent.

281 Industrial Chemicals

FRANCE—Chemical products for industrial use. Requests replies in French. Direct purchase and agency. Michel Doré (commission merchant), 2 Bld. d'Orléans, Rouen (Seine Maritime). WTD 4/3/64.

Metal degreasing products. Direct purchase and agency. S.A. des Carbures Rouaud Bary (manufacturer), 28 Rue Juliette Lamber, Paris 17e.

Crude chemicals, all types. Direct purchase and agency. S.E.P.P.I.C.—Societe d'Exploitation de Produits pour les Industries Chimiques (manufacturer), 70 Ave. des Champs Elysees, Paris 8e. WTD 4/5/63.

● **IRAQ**—Pour point depressant, 12,000 U. S. gallons. Tender No. 27/64; bid deadline July

Late Leads—Information received too late to be of value to bidders is published because many readers will find it of value in follow-up campaigns to sell complementary products and subsidiary services. Sometimes a cable to an agent on the scene will result in tie-in sales.

18. Government Oil Refineries Administration, Baghdad.★ (Telephone: 202-WO 7-2090).

NIGERIA—Naphthalene powder, refined, ready for use in making naphthalene balls. Requests quotations c.i.f. Lagos. Dee Kay & Sons (manufacturers, importers, wholesalers), 18 Ereko St., P.O. Box 2065, Lagos. WTD 6/10/64.

● **THAILAND**—Creosote oil, 6,000 drums. Bid deadline July 17. State Railway of Thailand, Yod-Se, Bangkok.★ (Telephone: 202-WO 7-2090).

TURKEY—Caustic soda, solid crystal form. Tugan Ticaret (importer, retailer), Ali Resat Aktugan, 863 Sokak, Turgutlu Is Hani, Izmir. WTD 6/16/64.

★★ UNITED KINGDOM—Trade Mission

Industrial organic, inorganic chemicals. L. K. Stone, H. W. J. Will & Partners, Devonshire Chambers, 146 Bishopsgate, London, E.C. 2. England. I.R. 134.

282 Synthetic Materials

ENGLAND—Synthetic resins. Vinatex Ltd. (manufacturer, importer), Devonshire Rd., Carshalton, Surrey. WTD 8/21/62.

Polyethylene, virgin and reprocessed; polystyrene, virgin and offgrade. Agency and direct purchase. Mackins & Wood Ltd. (exporters, importers), 2 Abbots Lane, Tooley St., London, S.E.1. WTD 8/7/62.

NIGERIA—Bakelite powder. Requests quotations c.i.f. Lagos. Dee Kay & Sons (manufacturers, importers, wholesalers), 18 Ereko St., P.O. Box 2065, Lagos. WTD 6/10/64.

TURKEY—Synthetic silicone rubber for manufacture of oil seals. Kenan Boyar (importer, manufacturer), Gazi Bulv. 100/B, Izmir. WTD 6/15/64.

283 Drugs

BELGIUM—Pharmaceutical specialties. Comptoir Chimico Pharmaceutique (importer, distributor), 1001 Chaussée d'Alsemberg, Brussels. WTD 5/17/63.

FRANCE—Chemical products for pharmaceutical use. Direct purchase and agency. Expandia (importer, dealer), 13 Ave. de l'Opéra, Paris 1er. WTD 4/20/64.

★★ UNITED KINGDOM—Trade Mission

Pharmaceuticals. L. K. Stone, H. W. J. Will & Partners, Devonshire Chambers, 146 Bishopsgate, London, E.C.2. England. I.R. 134.

284 Soap, Detergents, Cleaning Preparations, Perfumes, Cosmetics

AUSTRIA—Household cleaning materials, all kinds, for pots, pans, windows. Reiter & Ziegler (manufacturer, importer), Meinradgasse 4, Bregenz/Vorarlberg. WTD 5/14/64.

BELGIUM—Pomades, hair conditioners for straightening hair. Direct purchase and agency. Pharmacie Centrale de Belgique (manufacturer, distributor), 12 Rue du Telephone, Bruxelles. WTD 2/14/63.

FRANCE—Medical tooth paste. Requests replies in French. Laboratoires Goupil (manufacturer), 30 Ave. du Président Wilson, Cachan (Seine). WTD 6/1/64.

NIGERIA—Perfume in large quantities suitable for use in preparing cosmetics. Requests quotations c.i.f. Lagos. Dee Kay & Sons (manufacturers, importers, wholesalers), 18 Ereko St., P.O. Box 2065, Lagos. WTD 6/10/64.

PAKISTAN—Perfumes, cosmetics, all kinds. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Non-sudsing detergents for cleaning automobile windshields (non-oily), non-staining on paint). Arthur C. Charlton, Managing Director, Magnetex Ltd., Bath Rd., Harlington, Hayes, Middlesex. England. I.R. 174.

285 Paints, Varnishes, Lacquers, Enamels

BELGIUM—Paints, all kinds, including light reflecting, other paints for traffic signaling. Direct purchase and/or exclusive agency. Toch S.P.R.L. (distributor), 31 Philippe De Dentergemlaan, Deurne.

Paints, silicone basis for buildings. Exclusive agency and/or direct purchase. Siphons, S.P.R.L. (importer, exporter), 45 Drève du Moulin, Waterloo.

289 Chemical Products

BELGIUM—Waterproofing materials used in cement for insulation of buildings. Exclusive agency and/or direct purchase. Siphons, S.P.R.L. (importer, exporter), 45 Drève du Moulin, Waterloo.

Inks, writing fluids, all kinds. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

FRANCE—Chemical compounds for water and mud treatment. Direct purchase and agency. Societe d'Entreprise & de Travaux d'Assainissement—SETA Hygea-Simplex (manufacturer), 35 Rue St-Dominique, Paris 7e. WTD 4/30/64.

PAKISTAN—Essential oils. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Prevention and removal chemical products such as rust preventatives, industrial cleaners, other corrosion inhibitors. Agency. R. C. Lever, Director, Hursant Development Ltd., Hursant House, Central Way, North Feltham Trading Estate, Feltham Middlesex, England. I.R. 108.★

291 Petroleum Refining

THAILAND—Snow white petrolatum U.S.P. (petroleum jelly); packed in A-1 reconditioned drum of 380 lb. net; melting point USP or ASTM O F.122/128, Saybolt viscosity at 210 F. 63/68, Lovibond color 2" cell 1.5/2Y, consistency ASTM penetration at 77 F. 175/205, congealing point ASTM F. 114/120, solidifying point F.112/118. Paovaroj Paovarojkit, Rojanakit Ltd. Partnership, 1065 Songwad Rd., P.O. Box 1633, Bangkok.

302 Rubber Footwear

BELGIUM—Basket ball canvas shoes. Direct purchase and/or exclusive agency. FEDO (Far East Distribution Organization) (importer, retailer), 31 Osystraat, Antwerp.

303 Reclaimed Rubber

PAKISTAN—Raw rubber. Gosien & Co., 4-B Shahalam Market, Lahore. WTD 6/15/64.

TURKEY—Natural vulcanized rubber, ground form. Tugan Ticaret (importer, retailer), Ali Resat Aktugan, 863 Sokak, Turgutlu Is Hani, Izmir. WTD 6/16/64.

306 Fabricated Rubber Products

BELGIUM—Rubber floor coverings, all types. Direct purchase and/or agency. Duromit S.A. (importer, installer), 36-38 Rue de la Gare, Brussels 14.

Rubber toys, all types; toy balloons. Direct purchase and/or agency. Ets. Benoidt (agent), 136 Rue des Atrebates, Brussels.

Rubber erasers. Direct purchase and agency. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

307 Plastic Products

BELGIUM—Plastic advertising novelties, all kinds, price from few cents to $3 dollars: doilies, flowers, bowls, small containers, bangle bracelets). Usines Saint Brice S.A. (manufacturer, exporter, retailer), Les Filatures des 3 Suisses S.A., Chaussée de Lille, Orcq, Tournai.

Plastic advertising novelties, all kinds. Direct purchase and agency. Requests replies from manufacturers. Adrian Macai (agent), 96 Rue Potagère, Brussels 3.

Vinyl sheet floor coverings, all kinds. Direct purchase and/or agency. Duromit S.A. (importer, installer), 36-38 Rue de la Gare, Brussels 14.

ENGLAND—Plastic films, bags, containers, container closures, moulded and extruded plastic products for packaging applications. Direct purchase and agency. R.K. Plastics Ltd. (sales agent), 129 High St., Teddington, Middlesex. WTD 6/15/64.

FRANCE—Plastic kitchenware for sale in hardware shops. Requests replies in French. Direct purchase and agency. S.A. Bec—Bezombes & Comont (wholesaler), 42 Rue de la Roquette, Paris 11e.

311 Leather Tanning, Finishing

GERMANY—Leather for key cases, wallets, other small leather products. Mosbach, Gruber & Co. (manufacturer), 14-18 Lilistrasse, 605 Offenbach. WTD 6/11/64.

319 Leather Goods

BELGIUM—Leather advertising novelties, all kinds, price range from few cents to $3. Usines Saint Brice S.A. (manufacturer, exporter, retailer), Les Filatures des 3 Suisses S.A., Chaussée de Lille, Orcq, Tournai.

Imitation leather novelties. Direct purchase and agency. Requests replies from manufacturers. Adrian Macai (agent), 96 Rue Potagère, Brussels 3.

321 Flat Glass

★★ UNITED KINGDOM—Trade Mission

18 oz. anti-glare glass to provide reflectivity of about 22½%. Arthur C. Charlton, Managing Director, Magnetex Ltd., Bath Rd., Harlington, Hayes, Middlesex, England. I.R. 174.

322 Glass, Glassware

FRANCE—Glass balls, hollow, 5 m.m. in dia. and larger, suitable for incorporation in plastic material (polyester, epoxy, others) for fabrication of highly-resistant sandwich-type insulation products. Direct purchase and agency. Requests replies in French from manufacturers only. Robert Brunet ("Plastiques Robru") (manufacturer), 18 Rue Répond, Bordeaux, Gironde. WTD 6/19/64.

GERMANY—Special glass for manufacture of ph glass, electrode membranes. Dr. W. Ingold K.G. (manufacturer, wholesaler), 5-9 Broennerstrasse, 6 Frankfurt/Main. WTD 9/17/63.

NIGERIA—Glass containers suitable for packing pomades. Requests quotations c.i.f. Lagos, Dee Kay & Sons (manufacturers, im-

porters, wholesalers), 18 Ereko St., P.O. Box 2065, Lagos. WTD 6/10/64.

PAKISTAN—Glass, table, stemware. Sheikh Brothers, R-2 Nila Gumbad, Lahore. WTD 6/17/64.

326 Pottery

FRANCE—Ceramic tableware, fancy; small household articles such as ash-trays. Requests replies in French. Direct purchase and agency. S.A. Bec-Bezombes & Comont (wholesaler), 42 Rue de la Roquette, Paris 11e.

Porcelain insulating products for electrical and electronic use. Direct purchase and agency. Comerso S.A. (manufacturer, importer, dealer), 30 Bld. Bonne Nouvelle, Paris 10e. WTD 4/27/64.

329 Abrasive, Asbestos, Nonmetallic Minerals

BELGIUM—Vinyl asbestos floor coverings, all types. Direct purchase and agency. Duromit S.A. (importer, installer), 36-38 Rue de la Gare, Brussels 14.

331 Steel Mill Products

● **BURMA**—1615 l.t. mild steel plates; 654 tons mild steel structural shapes. Tender No. 53/05/63-64 (G), bid deadline July 25. The Secretary 1, People's Stores Corp. c/o Foreign Office, Rangoon.★ (Telephone: 202-WO 7-2363).

NETHERLANDS—Stainless steel sheathing for ships. Direct purchase and agency. Requests replies from manufacturers only. N.V. Contact Roestvrijstaal (importer, wholesaler, exporter, agent), Hoogstraat 31-41, Rotterdam.

PAKISTAN—Billets, blooms, bars, sheets, strips, wire, pig iron. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

THAILAND—Scrap iron and steel. Varong Vongthongsri, Iron & Steel Bar Industry Corp. (manufacturer, wholesaler), c/o Seng Guan Ltd. Partnership, Burapha Palace, Bangkok. WTD 8/28/62 (Seng Guan Ltd.).

● 550 m.t. of coke. Specifications for packing: strong gunny bags containing 50-55 Kgs. EPCM bag. Moisture 3.0% max., ash 12.0% max., sulphur 0.8% max., volatile matter 2.0% max., fixed carbon 85.0% max., calorific value 7.100 calories min., size 4-6 centimeters. Bid deadline July 22 at 3 p.m. with deposit of approx. $760.00 (Bht 16,000.00). Tender forms available upon payment of approx. $1.00 (Bht 20.00) per set from The National Economic Development Co., Ltd. 43 Soi Rajkroo, Bangkok.

● **TURKEY**—237 tons plates, angles, bars. Tender No. 3001-553, bid deadline July 20. Malzeme Mudurlugu, Denizcilik Bankasi TAO, Bahcekapi, Istanbul (Materials Purchasing Dept., Turkish Maritime Bank).★ (Telephone: 202 WO-7-2363).

● **UAR**—393 tons wide flange steel beams, 16 pcs. 1000 x 300 m/ms x 23.5 meters long, weight per meter, 314 kgs.; 16 pcs. 900 x 300 m/ms x 21.5 meters long, weight per meter, 300 kgs.; 32 pcs. 800 x 300 m/ms x 20.0 meters long, weight per meter, 269 kgs. Tender ref. No. 701/9/26, bid deadline August 15. The Inspector General, Ways & Works, Egyptian Railways, Ramses Square, Cairo. Copy of tender, conditions, specifications available for review only in Rm. 4222, Iron and Steel Division, Department of Commerce, Washington, D.C., 20230.

334 Secondary Smelting, Refining of Nonferrous Metals

● **INDIA**—Zircaloy-2 scrap, 300 kgs., preferably in form of turning and millings, for use in research program for reclamation of off-grade zircaloy-2. Tender No. AEE/P/MTL/6166, bid deadline July 21. Atomic Energy Establishment Trombay (Purchase Division), Mohatta Bldg., 3rd floor, Palton Rd., Bombay 1.★ (Telephone: 202-WO 7-2691).

335 Rolling, Drawing, Extruding of Nonferrous Metals

● **INDIA**—Inconel 600 (or equivalent) plate, 82 pc. ¼″ to ½″, ranging from 36″ to 52″ in width, 38″ to 9′6″ in length; Inconel 600 (or equivalent) strips, 36 pc., 9′6″ x 2″ x ½″; Inconel 600 (or equivalent) tubes, 6 pc. 8′ long x ⅛″ wall, ranging from 4″ I.D. to 9″ I.D.; 6 pc. 9′ long x ¼″ wall x 36″ I.D. Tender No. AEE/P/MTL/6179, bid deadline August 10. Atomic Energy Establishment (Purchase Division) Government of India, Mohatta Bldg., 3rd Floor, Palton Rd., Bombay 1.★ (Telephone: 202-WO 7-4685).

NETHERLANDS—Power supply cords, power wire and cable; to meet military specifications; requests replies from manufacturers only. Direct purchase and agency. Technisch Bureau Hellendoorn (manufacturer, importer), 15 Zwarteweg, The Hague. WTD 8/26/63.

342 Cutlery, Hand Tools, General Hardware

NETHERLANDS—Cutlery; stainless steel kitchen products; general assortment of kitchenware and equipment. Requests replies from manufacturers only. Direct purchase and agency. Van Zwamenburg N.V. (importer, manufacturer, agent), 723 Weena, Groothandelsgebouw, Rotterdam. WTD 6/1/64.

★★ **UNITED KINGDOM—Trade Mission**

Small hand tools. James E. Thomas, 49 Ayr Rd., Whitecraigs, Giffnock, Glasgow, Scotland. I.R. 42.

VENEZUELA—Cutlery, scissors, shears, trimmers, snips; hand tools, accessories; edge tools, except cutlery dies; files, rasps, file accessories, hand saws, saw blades, saw accessories; builders' hardware. Requests replies in Spanish. Casa Aleman (distributor), S.A., Calle 5, No. 8-49 San Antonio del Tachira, Estado Tachira. WTD 5/20/64.

343 Heating Apparatus, Plumbing Fixtures

NETHERLANDS ANTILLES—Plumbing fittings, trim (Plumbers Brass). Frederik Mercantile Co. (importer, retailer), 49 Caracasbaaiweg, Curacao. WTD 6/4/64.

344 Fabricated Structural Metal Products

BELGIUM—Prefabricated and demountable buildings, metal; farm buildings, garages; building panels, sections, metal. Direct purchase and agency. Carrosserie F. de Coster (manufacturer), 8 Rue Metsys, Brussels 3.

● **URUGUAY**—5 steam boilers for asphalt heating and for use as general cleaning units, 500 kgs. steam at 14 kgs/sq. cm. per hour, 900 lts. capacity at 93°C for cleaning purposes. Tender No. L. 28; bids close about August 21. The Ministerio de Obras Publicas, Seccion Licitaciones, Ave. 18 de Julio 1112, Montevideo. One copy of specifications in Spanish available for review at the Power & Electrical Equipment Division, BDSA-325, Rm. 4124, Department of Commerce, Washington, D.C. 20230. (Telephone: 202-WO 7-4242).

345 Screw Machine Products

BELGIUM—Special headed fasteners; rivet bolt, nut; solid tubular blind explosive rivets; corrugated nail fasteners. Direct purchase and agency. Beluma S.A. (importer, distributor), 28 Rue de la Royauté, Brussels 2.

346 Metal Stamping

FRANCE—Soap dispensers for linen supply laundries. Ets. Maurice Decroix (manufacturer, importer, exporter), 11 Rue Diaz, Boulogne (Seine). WTD 4/29/64.

Kitchen utensils, tinware; hardware, small houseware. Requests replies in French. Direct purchase and agency. S.A. Bec—Bezombes & Comont (wholesaler), 42 Rue de la Roquette, Paris 11e.

349 Fabricated Metal Products

BELGIUM—Ink stands, metal. Agency and/or direct purchase. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

Stainless steel napkin dispensers; new, seconds. Fedo (Far East Distribution Organization) (importer, retailer), 31 Osystraat, Antwerp.

353 Construction Machinery

FRANCE—Public works equipment, machines for road building, maintenance. Requests replies in French. Direct purchase and agency. Michel Doré (commission merchant), 2 Bld. d'Orléans, Rouen (Seine Maritime). WTD 4/3/64.

PHILIPPINES—Logging equipment: trucks, tractors, other heavy equipment. North Zambales Lumber Co. (importer, exporter, manufacturer), 2nd Floor, Labrador Bldg., Remedios Corner M. H. del Pilar, Manila. WTD 10/31/62.

● **URUGUAY**—4 drills, rock and pavement, portable, handheld, 45 lb. each min. weight, air operated, bit length approx. 21″; 2 cutting machines, clay, brick, asphalt, and concrete working, 25 lb. each min. weight, length 24″. Tender No. L.21, bid deadline August 12. Ministerio de Obras Publicas, Seccion Licitaciones, Av. 18 de Julio 1112, Montevideo. Only individuals or firms legally established in Uruguay may participate in public bids. Correspondence preferred in Spanish.★ (Telephone: 202-WO 7-5566).

● 4 pneumatic tired, 10 m.t. models, multiple wheel, pulled type rollers; tender No. L-12, bid deadline July 30. 3 tandem type 5-8 ton self-propelled rollers; tender No. L.13, bid deadline July 31. 15 tandem drive motor graders; tender No. L.14, bid deadline, August 3. 14 aggregate spreaders, centrifugal, truck mounted; tender No. L.15, bid deadline, August 4; 7 small municipal type pickup street sweepers; tender No. L.16, bid deadline August 5. 2 bituminous mixers, diesel power; tender No. L.18, bid deadline August 7. 2 bituminous rotary drum heaters; tender No. L.22, bid deadline August 13. 15 wheel type tractor shovel loaders, 4 wheel drive, 1 cu. yd. capacity, 69.5 h.p. diesel engine; tender No. L.26, bid deadline August 19. 1 bituminous asphalt heater, 330 gal. capacity, mounted on single axle trailer; tender No. L.27, bid deadline August 20. 2 track-laying type tractor shovel loader, dozer, 100 h.p. diesel; tender No. L.33, bid deadline August 31. 3 concrete mixers, trailer mounted, 0.1 cubic meter capacity, 3 h.p. air cooled engine; tender No. L.36, bid deadline September 3. 3 rippers, disc type, min. weight 450 kgs each; 16 steel discs, 50-65 centimeter dia.; also disc sharpener driven by electric motor; tender No. L.42, bid deadline September 11. 7 rippers, min. operating weight 5 m.t.; tender No. L.44, bid deadline September 15. All bids requested in Spanish. Only individuals or firms legally estab-

lished in Uruguay may participate in public bids; notify your agent, distributor or representative to enter your bids if interested. Ministerio de Obras Publicas, Seccion Licitaciones, Av. 18 de Julio 1112, Montevideo.★ (Telephone: 202-WO 7-5566).

354 Metalworking Machinery

BELGIUM—All kinds of riveting machines, fastening systems, non-portable power driven type; portable hand type; electric hand type; brake lining, ring gear riveters for use on automobiles. Direct purchase and exclusive agency for Benelux countries. Beluma S.A. (importer, distributor), 28 Rue de la Royauté, Brussels 2.

FRANCE—Nailing machines, hand operated or pneumatic. Direct purchase and agency. J. Leichnam (manufacturer, agent), 89 Rue de la Ferme Falk, Haguenau (Bas-Rhin). WTD 4/29/64.

GERMANY—Automatic wire binding and taping machinery, equipment. Dr. Ing. Kurt Schmalfuss (manufacturer, importer, exporter, wholesaler, sales agent), P.O. Box 138, 705 Waiblingen/Wuerttemberg. WTD 2/5/63.

● **INDIA**—Supply of 17 machine tools of various types including grinding machines, drilling machines, boring and facing machines, lathes; universal bending and folding machines. Tender No. HE/B/PP/GT/-MT/34, bid deadline August 10. Manager, Purchasing & Main Stores, Heavy Electricals (India) Ltd. P.O. Piplani, Bhopal. Tender documents available for review or purchase ($4.20) from India Supply Mission (Ref. I.S.M. D/ENQ/1074), 2536 Massachusetts Ave., NW., Washington, D.C. 20008.

● Heavy duty guillotine shearing machine to cut mild steel plates up to 16 mm. Maximum cutting length 3200 mm; distance between housings 3300 mm. Approx. 20 strokes per minute. Tender No. SWP 6/461/2A/II, bid deadline August 18. Director General of Supplies & Disposals, National Insurance Bldg., Parliament St., New Delhi. Specifications available for $2.10 from India Supply Mission (Ref. D/ENQ/1377), 2536 Massachusetts Ave., NW., Washington, D.C. 20008.

● 49 machine tools of various types including slotting machines, vertical milling machines, radial drills, grinding machines, lathes. Tender No. HE/B/PPX/GT/MT/35, bid deadline August 18. Manager, Stores & Purchases, Heavy Electricals (India) Ltd. P.O. Piplani, Bhopal. Tender documents available for review or purchase ($6.30) from India Supply Mission (Ref. D/ENQ/1075), 2536 Massachusetts Ave., NW., Washington, D.C. 20008.

● **UGANDA**—100 ton wire rope splicing press, mechanical, complete with standard equipment. Overseas Purchasing Division, East African Railways & Harbours. Tender number and bid deadline not stated. Tender documents available from East African Railways & Harbours Overseas Agents, 4 Millbank, London S.W.1, England. Ref. Circular 13 of requirements to be purchased overseas.

● Self-contained 100/100 ton spring buckle press incorporating assembly table with hydraulic vice. Tender No. and bid deadline not stated. Overseas Purchasing Division, East African Railways & Harbours. Tender documents available from East African Railways & Harbours Overseas Agents, 4 Millbank, London, S.W.1, England. Ref. Circular 9 of requirements to be purchased overseas.

● Plain dial milling machine with Arbor-Loc spindle nose. 14" dividing head and cutter attachment. Table size 78"x16". Tender No. and bid deadline not stated. Overseas Purchasing Division, East African Railways & Harbours. Tender documents available from East African Railways & Harbours Overseas Agents, 4 Millbank, London S.W.1, England. Ref. Circular 8 of requirements to be purchased overseas.

● Axle turning and grinding machine for turning and finishing roller bearing journals from existing plain axles. Tender No. and bid deadline not stated. Overseas Purchasing Division, East African Railways & Harbours. Tender documents available from East African Railways & Harbours Overseas Agents, 4 Millbank, London S.W.1, England. Ref. Circular 10 of requirements to be purchased overseas.

★★ UNITED KINGDOM—Trade Mission

All types of mechanical gauges: plug, screw, ring, other type precision mechanical gauges. Manufacturer. Headland Gauges Ltd., Kingston Road, Leatherhead, Surrey, England. I.R. 189.★

355 Special Industry Machinery

BELGIUM—Sealing machinery for plastic material; also continuous running sealing machine (HF), ultrasonic plastic sealing machinery. Matindus, (importer), 71 Rue du Château Beyaerd, Brussels. WTD 8/6/63.

Machinery for converting aluminum film, plastic foil for use as containers; packaging machines, all kinds, for use in food industry. Direct purchase and agency. Ven S.V.B.A. (commission agent, importer), 76-78 De Fierlantstraat, Brussels.

CEYLON—Machinery for manufacture of dry cell batteries for flashlights. Jafferjee Brothers (manufacturer), Import Dept., 161 Prince St., Colombo 11. WTD 1/31/64.

ENGLAND—Woodworking machinery capable of producing hardwood flooring blocks, tongue-and-groove and plain sided. Output preferably 80 blocks per minute. Additional information on type machinery desired is available from Trade Opportunities Staff, BDSA-111, Rm. 4203, Department of Commerce, Washington, D.C. 20230. Acme Flooring Ltd., River Rd., Barking, Essex.

FRANCE—Machines for fabricating clay plates for ball-traps (pigeon shooting). Ets. Henry-Huret (manufacturer), 49 Rue de Paris, Lille (Nord). WTD 12/6/61.

GERMANY—Textile machinery. Direct purchase and agency. Requests replies from manufacturers only, quotations c.i.f. Hamburg or Bremen. Ernst Ludwig & Co., 791 Neu-Ulm/Donau, Max-Eyth-Str. 33. WTD 6/15/64.

All kinds of machinery, equipment, supplies for printing and graphic arts industry. Direct purchase and agency. Graphischer Grosshandel Hugo Janko (wholesaler, sales agent), Stuttgart 13, Haussmannstrasse 158A. WTD 1/23/64.

GREECE—Complete plant for production of worsted wool yarn. Requests replies from shippers with price quotations. Can place order immediately. Michael M. Vellos (commission agent), 5 Peristeriou St., P.O. Box 212, Thessaloniki.

MALAYSIA—Tenders invited for 31,200 spindles, 792 looms, and complete finishing textile plant. Desires latest style equipment. Quotations cif Singapore. Malaysia Textile Industries Ltd. (manufacturer), 2 George St., P.O. Box 326, Singapore 1. WTD 9/20/63.

MOROCCO—Photoengraving equipment, silk screen process; importer requests quotations Casablanca. Direct purchase and agency. Ets. Theodore, 65 rue Saint-Die, Casablanca.

PAKISTAN—Medium size packaging plant. Sheikh Brothers, R-2 Nila Gumbad, Lahore. WTD 6/17/64.

★★ UNITED KINGDOM—Trade Mission

Automatic coil winders for w/w resistors, transformers; suitable for wires down to 0.0004"; moulding machines suitable for thermosetting plastic with features giving high production rates when transfer-moulding resistors and coils. Nigel A. Soloman, ERG Industrial Corp. Ltd., Luton Rd., Dunstable, Bedfordshire, England. I.R. 195.

Assembly jigs, headers, cams for production of transistors. Import merchants. Mr. Jones & Mr. D. Shamash, Roditi International Corp. Ltd., 12a Golden Square, London, W.1., England. WTD 2/26/63. I.R. 133.

Flexowriter type equipment for use in scientific computing. M. L. Shaw, Advanced Development Dept., Scientific Computing Div., Elliott Automotion, Boreham Wood, Herts, England. WTD 5/13/63. I.R. 146.

Commercial disc cutting equipment at 33⅓, 45 speed range. Manufacturer. A. B. Hornick, Director, Hornton's Electronics Inc., Lombard House, Great Charles St., Birmingham, 3. England. NCIA. I.R. 20.

Electronic weighing heads that can be applied to small weights (5 grams to 5 pounds). Manufacturer. Messrs. Southall & Smith Ltd., Villa Street Works, Hockley, Birmingham, England. WTD 3/6/63. I.R. 4.

356 General Industry Machinery

BELGIUM—Packaging, wrapping machines, all types, for merchandise, equipment, various kinds. Direct purchase and agency. Ven P.V.B.A. (commission agent, importer), 76-78 De Fierlantstraat, Brussels.

NETHERLANDS—Variable gear box speed reducers on a stock keeping basis for Netherlands, Belgium; complete information on technical data, prices, delivery times requested. Technisch Handelsbureau Bege N.V. (importer, wholesaler, exporter), 38 Galileistraat, The Hague.

★★ UNITED KINGDOM—Trade Mission

Automated industrial paint spraying equipment for industrial markets. Agency. R.C. Lever, Director, Hursant Development Ltd., Hursant House, Central Way, North Feltham Trading Estate, Feltham, Middlesex, England. I.R. 108.★

Garage equipment, pumps, filtration equipment. Sales Agents. T. L. Seaman, Director, Gerard Wakeman Ltd., 1 Clifton St., Glasgow, C.3., Scotland. I.R. 47.

357 Office, Computing, Accounting Machines

BELGIUM—Stapling machines. Agency and/or direct purchase. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

TURKEY—Food store scales. Tugan Ticaret (importer, retailer), Ali Resat Aktugan, 863 Sokak, Turgutlu Is Hani, Izmir. WTD 6/16/64.

★★ UNITED KINGDOM—Trade Mission

Computer peripheral equipment, particularly ultra-high speed printers, data display systems, low-cost "desk top" size computers, equipment associated with punched and magnetic tape, offers sales, service, maintenance, lease facilities. P. McKennell, Technical Director, Scientific Furnishings Ltd., Electronics Division, Poynton, Cheshire, England. WTD 4/11/63. I.R. 110.

Storage equipment for punched cards; accessories, equipment for cleaning, winding, handling punched cards; tape. Manufacturer. Accounting Machine Accessories Ltd., 31 Essex Street, Birmingham 5, England. I.R. 11.

358 Service Industry Machines

BELGIUM—Commercial laundry, dry cleaning equipment, all types, including washing machines, laundry drying tumblers; commercial laundry parts, attachments, accessories. Requests replies from manufacturers. Soprima S.P.R.L. (wholesaler, distributor), 6 Champs Elysées, Ghent.

FRANCE—Conditioning equipment, processes for water and mud treatment. Direct purchase and agency. Societe d'Entreprise & de Travaux d'Assainissement—SETA Hygea-Simplex (manufacturer), 35 Rue St-Dominique, Paris 7e. WTD 4/30/64.

MALAYSIA—Tenders invited for air conditioning equipment for textile mill. Price quotations cif Singapore. Malaysia Textile Industries Ltd. (manufacturer), 2 George St., P.O. Box 326, Singapore 1. WTD 9/20/63.

NETHERLANDS—Coffee making machinery, food transport systems. Requests replies from manufacturers only. Direct purchase and agency. Van Zwanenburg N.V. (importer, manufacturer, agent), 723 Weena, Groothandelsgebouw, Rotterdam. WTD 6/1/64.

PAKISTAN—Window type airconditioners; airconditioning units for theaters, factories. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Automatic gasoline vending equipment (prepayment, post-payment types); coffee, hosiery, laundry vending machines. John Marmion, Managing Director, John Marmion, 56 Waterloo Rd., Waterloo, Liverpool, England. NCIA. I.R. 130.

Coin operated car wash machinery. After initial purchases of equipment would like to license for manufacture. L. M. Lewis, Luxury Speed Wash, 102 Bath St., Glasgow, C.2. Scotland. NCIA. I.R. 40.

Automatic vending equipment for food, beverages, cigarettes. Sole Agency. Alfred W. Stockton, 16 Braemer Rd., Sutton Coldfield, Warwickshire, England. NCIA. I.R. 12.

Industrial ultra-sonic cleaning equipment, manufacturer wants to act as agency representative for U.S. manufacturer. Headland Engineering Development Co., Electro-mechanical Div., Melon Rd., London, S.E. 15, England. I.R. 158.

● **URUGUAY**—15 steam-type wall and building cleaning machines with gasoline motors, mounted on trailers. Tender No. L46 is in Spanish, bid deadline Sept. 17. Ministerio de Obras Publicas, Seccion Licitaciones, Av. 18 de Julio 1112, Montevideo. Correspondence preferred in Spanish. Only firms or individuals legally established in Uruguay may participate in public bids. Interested firms should enter bids through their Uruguayan representatives. Import and other duties are waived.★ (Telephone: 202-WO 7-4379).

360 Electrical Machinery, Equipment, Supplies

★★ UNITED KINGDOM—Trade Mission

All kinds of electronic power supplies. Manufacturer. Brandenberg Ltd., 139 Sandersted Rd., South Croydon, Surrey, England. I.R. 112.★

361 Electric Transmission, Distribution Equipment

AUSTRALIA—Magnetic field measuring units; electro-balance recording instruments, shaft angle encoders; gamma background monitors. Fred A. Boughey Associates, G.P.O. Box 4985, Sydney. WTD 2/10/64.

★★ UNITED KINGDOM—Trade Mission

Linear power controllers, transducers. Agency. R. C. Lever, Director, Hursant Development Ltd., Hursant House, Central Way, North Feltham Trading Estate, Feltham, Middlesex, England. I.R. 108.★

Transformers, control equipment, magnetic amplifiers, sound reproduction equipment. Importer, exporter interested in importing, distribution, cross licensing agreement with U.S. firms. Parmeko Ltd., Percy Rd., Aylestone Park Leicester, Leicestershire, England. I.R. 94.

Digital voltmeters; manufacturer. A. G. Brown (electronics), Lower Mill, Busby, Scotland. I.R. 62.

VENEZUELA—Low voltage distribution equipment, 1,200 v. and under: busducts, circuit breakers, distribution cutouts, fittings, meter mounting equipment, electrical panelboards, distribution switchboards, switches, also fuses, fuse equipment under 2,300 v.; power and distribution transformers in general, other transformers such as induction voltage regulators, boosters; for electrical utility companies. Direct purchase and agency. General Export-Import, C.A. GEXIM, Edificio Mar, Ave. Francisco de Miranda, Caracas. WTD 1/28/64.

362 Electrical Industrial Apparatus

● **IRAQ**—Supply, delivery and erection of one 500 kw, 400/231 v., 3 phase, 4 wire, 50 cycle, diesel generator set with auxiliary equipment. Tender No. 24, bid deadline August 4. Specifications may be obtained from Directorate General of Planning & Design, Ministry of Municipal & Rural Affairs, Baghdad, upon payment of $25.80 including airmail charges. One copy of specifications available for review only, Power & Electrical Equipment Division, Rm. 4124, BDSA-325, Department of Commerce, Washington, D.C. 20230. (Telephone: 202-WO 7-4242).

★★ UNITED KINGDOM—Trade Mission

Advanced stepping switches, solonoid operating valves to complement current product lines; fire detection audio alarm systems for homes, institutions with eventual manufacture in the U.K. B. G. Austin, Sales Manager, B. & R. Relays Ltd., Temple Fields, Harlow, Essex, England. WTD 2/12/63. I.R. 90.

U.S. relays, contactors, heavy duty types; motor control gear, light and heavy relays and contactors, for industrial applications. Agency. J. Torbe, Director, J. Torbe Ltd., Kings Works, Ham Lane, Kingswinford, Staffs, England. I.R. 13.

Agency for following products with eventual license to manufacture in the U.K.: Neutron generators, portable sealed-off units cable supply 5 x 108 neutron per sec.; main use will be for activation, training; also for reactor control applications; power supplies for these units will also be required. Additional requirements call for ion fission chambers for flux counting for reactor control purposes; high intensity X-ray tubes for crystallography; microwave tubes—specifying millimeter clystrons, magnetrons, and extruded interaction oscillators. Manufacturer. W. G. Hoskins, Director, Elliott Automation Ltd., Elstree Way, Boreham Wood, Hertfordshire, England. WTD 5/13/63. I.R. 91.

Digital electronic equipment; one-line quality analyzers for process industries. Manufacturer. Mimic Diagrams Celectronics Ltd., Maxim Rd., Crayford, Kent, England. WTD 2/28/64. I.R. 114.

Industrial automation equipment, all kinds. Importer. Pirelli; Bockenheimer Landstr. 96, 6 Frankfurt am Main, Germany. NCIA. I.R. 160.

Wishes to represent U.S. firms engaged in electron beam work, vacuum melting equipment, related fields. Manufacturer, importer, exporter. Vacuum Metallurgical Development, Alma Works, Manchester, Lancashire, England. I.R. 202.

Electronic components such as resistors, capacitors, meters, relays, tubes, transistors, rectifiers. Sales representative. K. Stimson & Co., 53 London Road, Leicester, England. NCIA. I.R. 3.

Reed relays, tantalum capacitors, micro circuits, A. C. pickoffs; all components must be military approved. Urgently requests replies from qualified suppliers only. Firm also interested in manufacturing tooling, manufacturing methods simplification equipment. Importer, agent. Brookes and Green, 1 Leadenhall St., London E.C.3, England. WTD 4/4/63. I.R. 65 .

● **URUGUAY**—8 generator sets, 24 kw, A.C., 230 v., 50 cycles, 1 phase, portable diesel or gasoline, 4 cycle engine, water cooled. Tender No. L. 19, bids close about August 10. Ministerio de Obras Publicas, Seccion Licitaciones, Ave. 18 de Julio 1112, Montevideo. One copy of specifications in Spanish available for reference only at the Power & Electrical Equipment Division, BDSA-325, Rm. 4124, Department of Commerce, Washington, D.C. 20230. (Telephone: 202-WO 7-4242).

VENEZUELA—AC generators, 2,000 kw and over to be used in power plants for utility companies. Direct purchase and agency. General Export-Import C.A. GEXIM, Edificio Mar, Ave. Francisco de Miranda, Chacao, Caracas. WTD 1/28/64.

363 Household Appliances

BELGIUM—Non-electrical stainless steel household appliances, gadgets. Direct purchase and/or exclusive agency for Benelux countries. Ets. Elite S.P.R.L. (importer, retailer), 389 Chaussée de Mons, Brussels.

NETHERLANDS—Household and electrical appliances such as mixers, pressure cookers, cooking utensils. Direct purchase and/or agency. Requests replies from manufacturers only. Handelsonderneming W. Jansen (importer, exporter, agent), 3 Jozef Israelslaan, The Hague. WTD 6/16/64.

★★ UNITED KINGDOM—Trade Mission

Glass-lined water heating equipment for home installation. D. R. Willmott, Technical Director, Perdio Electronics Ltd., Brownhill St., London, E.C.2, England. I.R. 92.

364 Electric Lighting, Wiring Equipment

● **MALTA**—Supply and installation of station lighting, heating and ventilation equipment, 415 v., 3 phase 4 wire, 50 cycle. Contract No. 1027/PWS/71, bid deadline August 24. The Secretary, Malta Electricity Board, 38 Ordinance St., Valletta, Malta, G.C. A precis describing the project and contract is available on application to the Secretary. Tender documents may be obtained from Malta Electricity Board upon payment of $14 per set.

PAKISTAN—Pole and transmission line equipment. Gosien & Co., 4-B Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Low price fluorescent lamps for industrial, consumer usage. Manufacturer. D. R. Willmott, Technical Director, Perdio Electronics Ltd.,

Brownhill St., London, E.C. 2., England. I.R. 92.

VENEZUELA—Pole line and transmission hardware, accessories for transmission of AC current from power plants. Direct purchase and agency. General Export-Import, C.A. GEXIM, Edificio Mar, Ave. Francisco de Miranda, Chacao, Caracas. WTD 1/28/64.

● **VIET-NAM**—Plugs, switches, lamps. Tender No. 1315-15064, bid deadline July 22. Central Purchasing Authority, 140 Hong Thap Tu, Saigon. Description of equipment in French.★ (Telephone: 202-WO 7-4242).

● Circuit breakers and generators. Tender No. 1314-15064, bid deadline July 22. Central Purchasing Authority, 140 Hong Thap Tu, Saigon. Description of equipment in French.★ (Telephone: 202-WO 7-4242).

365 Radio, Television Receiving Sets

★★ UNITED KINGDOM—Trade Mission

Interested in importing with eventual license to manufacture transisterized, battery-operated-powered amplifiers for industrial and radio markets, verticle and traverse models, associated accessories for installation. J. Rawich, Director, Antiference Ltd., Aylesbury, Buckinghamshire, England. WTD 2/3/64. I.R. 86.★

366 Communication Equipment

BELGIUM—Aircraft electronic components; systems equipment; radar equipment. Cobelda (manufacturer), 1440 Chaussée de Haecht, Brussels 13. WTD 10/31/63.

FRANCE—Electronic signals, lighting equipment for special purposes. Ouvrard-Villars & Guilux (manufacturer), 65 rue du Docteur Bauer, Saint-Ouen (Seine). WTD 4/15/64.

● **SOUTH AFRICA**—Supply of a 12-channel open wire telephone carrier system, associated equipment complying with specifications of British Post Office. Tender No. TB 580/64, bid deadline August 21. The Secretary, Central Tender Board, P.O. Box 254, Mafeking.★ (Telephone: 202-WO 7-4823).

★★ UNITED KINGDOM—Trade Mission

1,500 Mc/s, 6,000 Mc/s, 11,000 Mc/s microwave radio TX/RX equipment. Wide band systems not needed initially, only systems for transmission of up to 1 supergroup (60 channels). Manufacturer. Automatic Telephone & Electric Co. (Bridgnorth) Ltd., Bridgnorth, Shropshire, England. I.R. 28.

All kinds of micro-wave equipment. Importer. C. T. London Ltd., 27 Ashley Place, London, S.W.1, England. WTD 12/23/63. I.R. 148

367 Electric Components, Accessories

★★ UNITED KINGDOM—Trade Mission

General electronic components. M. Cohen, Director, Highland Electronics Ltd., 26-28 Underwood St., London, N.1., England. WTD 3/10/64. I.R. 165.

SCR motor control units 1 to 20 hp., solid state alarm systems representative. P. H. Reeves, Director, Henry Reeves Ltd., 19 St. Michaels St., Oxford, England. I.R. 154.

Semi-conductor devices of all types, resistors, capacitors, potentiometers, switchgear. Distributors & Sales Agents. A. K. Oldham, Sales Manager Pinnacle Electronics Ltd., Achilles St., New Cross, London, S.E.14. I.R. 153.★

Color-bar generators, other test equipment for color television. Agency. Albert S. Linay, Sales Manager, Bemex Instruments, 54 Victoria Rd., Surbiton, Surrey, England. NCIA. I.R. 115.

Indicating meters, oscilloscopes, test equipment generally. W. H. Sarson, Director, Scientific Measurements & Equipment Ltd., 78 Main St., Queniborough, Leics, England. WTD 1/10/62. I.R. 149.

Resistors, power, precision; all electronic types of capacitors, nucleonic components; communications field components. Manufacture representative. C. W. Fisher, Branch Manager, A.E.P. International Ltd., 443 Gt. West Rd., Hounslow, Middlesex, England. WTD 11/7/62. I.R. 96.

Wants to obtain U.S. products to sell to augment present line. Especially interested in data processing field. Major G. O. Walter and W. J. Percival, Managing Director, Dep. Works Manager, A.P.T. Electronic Industries Ltd., Chertsey Rd., Byfleet, Surrey, England. I.R. 168.★

Semi-conductor and solid state components. Agency of manufacturers' representatives. Gordon H. Leonard and Deane Narayn, Associates, Leonard & Narayn Associates, 57 Fairholme Rd., West Croydon, Surrey, England. NCIA. I.R. 164.

Standard ranges of bobbins for reed relays of all configurations preferably with terminating pins. Can be thermosetting, epoxy or thermoplastic material. Reed relays and any devices suitable for switching down to 10 microvolts, reed switches, dry and mercury wetted all sizes and configurations, e.g. Form A, C, D, precision ultra stable (50 p.p.m. drift after 3000 hours at 70°C.). Ambient with load rated to give rise in temperature of the windings 20°C, wire wound or film resistors. Nigel A. Soloman, Executive Director, ERG Industrial Corp. Ltd., Luton Rd., Dunstable, Bedfordshire, England. I.R. 195.

Band pass crystal filters ($20 price range). Import Merchants. Mr. Jones and Mr. D. Shamash, Roditi International Corp. Ltd., 12a Golden Square, London, W. 1., England. WTD 2/26/63. I.R. 133.

16 standard logic packages such as flip flops, gate circuits and triggers. Interested in selling their products in U.S. and in representing other instrument lines in U.K. Ultimately desire license/cross license arrangements. W. C. Dunn, Managing Director, Applied Developments Ltd., Horndean Square, Horndean, England. NCIA. I.R. 182.

Marine electronic equipment including depth sounders, radio direction finders, radio telephones, intercoms, emergency transmitters. Also lines of competitively-priced electronic components such as fixed and variable capacitors, carbon and metal-film resistors, diodes and general purpose transistors. Sales Agency. Gordon McFalson, Commodore Marine & Electronic Ltd., 43 Priest Ave., Wokingham, Berkshire. NCIA. I.R. 82.

Switches, transistors and rectifiers, logic units, plastic molded parts and glass-to-metal seals. Also, component and testing equipment, frequency synthesizers and peripheral data processing equipment. R. McLellan, Director, Spectrum Electronics Ltd., 74 Southfield Rd., Enfield, Middlesex, England. NCIA. I.R. 69.

Recording instruments, transducers, amplifiers, strain gauge equipment, tape recording. R. I. Horton, Managing Director, Glevum Instruments, 13 Gatton Way, Hucclecote, Glos., England. NCIA. I.R. 135.

Electronic, micrologic and general electronic equipment. T. F. Bunzl, 27 West Heath Gardens, London, N.W. 3., England. NCIA. I.R. 163.

Precision stampings (lightweight) for automotive, electrical, electronic industries either to specifications or stock inventory of industrial metal parts. Manufacturer. Robin Johnstone, Marketing Manager, Sunray Ltd., 11 Clairmont Gardens, Glasgow, C.3. Scotland. I.R. 54.

Amplifiers, calibrators, noise generators, modulators, ratiometers, signal sources, radar test equipment, transducers and recorders in microwave and process control line. Manufacturer. Arthur L. Whitwell, Managing Director, Whitwell Electronics Ltd., 1 Erskine Square, Queen Elizabeth Ave., Hillington, Glasgow, S.W.2., Scotland. I.R. 50.

Automatic control devices, relays, components, regulators, timers, clocks, proportional amplifiers, controllers and other electronic equipment aligned to electrical and wholesale electronic trade and design automation industries. Agency & Distribution. B. R. Fletcher, Mgr. Director, Horsburgh Francis Ltd., 200 Gouch St., Birmingham 5, England. I.R. 18.

High quality capacitors, range 10 MMF thru 2 MFD, for military and specialized markets. Manufacturer. D. Lace, Sales Div. Mgr., Denbro Ltd., Soho Hill, Handsworth, Birmingham, England. WTD 1/17/63. I.R. 10.★

Reliable high precision components in the field of advanced circuit edged connectors, switches and micro-circuit componentry. Manufacturer. E. D. Birch, General Manager, Ultra Electronics (Components) Ltd., Industrial Estate, Long Drive, Greenford, Middlesex, England. WTD 1/19/63. I.R. 67.

Precision potentiometers, resistors, phase angle meters; products related to these components and instrument fields. Representation leading to license or joint venture. P. I. Paul Hughne, Managing Director, Booker Bowmar Ltd., 169 Sloane St., London, S.W.1., England. I.R. 73.

Microwave equipment and electronic components with a view to initially selling in the U.K. and ultimately licensing for manufacture. L. A. Smulian and D. Clare, Joint Mg. Directors, James Scott Ltd., Cartyne Industrial Estate, Glasgow E.2., Scotland. WTD 5/18/60. I.R. 161.

All kinds of electronic components. Interested in agency representation. Manufacturer, importer. Crawford, Hansford & Kimber Ltd., Technical Components Ltd., St. Cross Rd., Farnham, Surrey, England. I.R. 78.

Control relays, power semi-conductors, numerical control systems. Manufacturer. Electronic Control & Installation Co., Ltd., 341a Soho Rd., Handsworth, Birmingham, England. WTD 1/3/64. I.R. 26.

369 Electrical Machinery, Equipment, Supplies

● **SUDAN**—Primary batteries, wet cell, 13,000. Contract No. 185, bid deadline August 18. Controller, Stores & Workshops, Dept. of Posts & Telegraphs, Light Industrial Area Khartoum South.★ (Telephone: 202-WO 7-4242).

★★ UNITED KINGDOM—Trade Mission

Miniaturized compact fans and blowers primarily for aircraft, military, electronics industries. Agency. H.R.J. Kennedy, A.K. Fans Ltd., 20 Upper Park Rd., London, N.W. 3., England. WTD 10/22/62. I.R. 121.★

Ultrasonic burglar alarms, small ship RDR units and navigation equipment. Edgar D. Cannon, President, Cannon Electronics & Automation Ltd., 60 Bullsmoor Lane, Enfield, Middlesex, England. I.R. 107.

Point-to-point sales input machine devices for a wide range of applications in retail department stores and generally oriented to small business operations. Devices should be closely linked to sales control of paper tape, tag, plate other than bookkeeping or office machine category. Also interested in separately attached cash register devices for recording

information for input to electronic data processing systems. C. P. Cakebread, Director, R. C. Thomas, Manager, Sales Research Dept., Kalamazoo Ltd., Northfield, Birmingham 31, England. I.R. 27.★

Radiation detectors, high speed oscilloscopes (nanosecond range), radiation survey equipment, meters and radiation counters for application in nuclear energy field, 50KVA constant voltage and voltage regulating equipment, 25-35 KVA power supplies and electronic stabilizers. Initial import leading to license for local manufacture. Mr. Bygrave and T. B. Fox, Managing Dircetors, High Voltage Servicing Co. Ltd., 8 Kildara Close, Eastcote, Middlesex, England. I.R. 111.

371 Motor Vehicles, Motor Vehicle Equipment

BELGIUM—Trailers, single and tandem axle, motor truck; trailer chassis. Direct purchase and agency. Carrosserie F. de Coster (manufacturer), 8 Rue Metsys, Brussels 3.

Automotive replacement parts, all kinds, especially for G.M. and Clark equipment. Direct purchase and/or agency. Ets. Ed. Bellekens & Co. (importer, distributor), 50 Paardenmarkt, Antwerp.

GERMANY—Auto parts, accessories. Direct import and/or exclusive agency representation for Federal Republic of Germany. Hans Alshut (importer, sales agent, wholesaler), 11-13 Hanauer Landstrasse, 6 Frankfurt/Main. WTD 6/11/64.

NORWAY—Automobile accessories, equipment. Direct purchase and agency. Gummi A/S K. Lund & Co. (Attn. Birger Vollan), 3 Reviersredet, Oslo. WTD 4/30/64.

PAKISTAN—Automotive spare parts. Gosien & Co., 4-B, Shahalam Market, Lahore. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Auto accessories including mirrors, lamps, fire extinguishers, tire inflators. Manufacturer. Leonard Trigg, Managing Director, Desmo Ltd., Pensnett, Brierley Hill, Staffs., England. I.R. 22.

372 Aircraft, Parts

BELGIUM—Aircraft parts; assembly of aircraft; ground support in aircraft field. Cobelda (manufacturer), 1440 Chaussée de Haecht, Brussels 13. WTD 10/31/63.

373 Ship Building, Repairing

IRELAND—Livestock ship, 300/350 tons (displacement); purchase or lease on charter for use between ports of Sligo, Ireland and Glasgow, Scotland. Must be fully equipped livestock carrier in line with British port inspection regulations. Western Livestock Exporters Ltd. (exporter), Rathrippon, Collooney, Co. Sligo. WTD 6/19/64.

380 Professional, Scientific, Controlling Equipment

NETHERLANDS—Teaching machines such as computers, for use with children and adults in connection with tests, studies, problem answers, technical knowledge, science, geography. Requests replies from manufacturers only. Direct purchase and agency. Valenzo N.V. i.o. (importer, agent), Herenweg 7, Warmond.

★★ UNITED KINGDOM—Trade Mission

High class instruments and components from U.S. firms who will provide progressive service. C. G. Bailey, Commercial Director, Coutant Electronics Ltd., 3 Trafford Rd., Richfield Estate, Reading, Berkshire, England. WTD 1/16/64. I.R. 77.

381 Engineering, Laboratory, Scientific, Research Instruments

● **THAILAND**—One automatic photoelectric polarimeter with amplifier, control unit, accessories, including instruction book. Bid deadline July 27. Office of the Sugar Industrial Aid Fund, Luang Rd., Bankok.★ (Telephone: 202-WO 7-2939).

Late Leads—Information received too late to be of value to bidders is published because many readers will find it of value in follow-up campaigns to sell complementary products and subsidiary services. Sometimes a cable to an agent on the scene will result in tie-in sales.

★★ UNITED KINGDOM—Trade Mission

Instrumentation (laboratory and process). Agency or manufacturers' representatives. Gordon H. Leonard and Deane Narayn, Associates, Leonard & Narayn Associates, 57 Fairholme Rd., West Croydon, Surrey, England. NCIA. I.R. 164.

Instruments: vibration, generating, measurement, nucleonic as used by Universities, hospitals; also packaged components. Manufacturer. D. M. Cartwright, Director, Hawnt & Co. Ltd., 112-114 Pritchett St., Birmingham 6, England. I.R. 15.

Microscopes (not electronic). A.E.L. Todd, Mg. Director, Micro Instruments (Oxford) Ltd., 31 St. Giles, Oxford, England. I.R. 129.

Interested in exchange of products and patents for automated teaching machines. Manufacturer. Educational Systems Ltd., 12 Hatton Gardens, London, E.C.1, England. I.R. 180.

Optical measuring, micro-wave measuring equipment; X-ray equipment used in industrial laboratories, research-specifically refraction, fluorescence and molecular biology; measurement of distance and angle, with angle to one second or better; for distances, firm is interested in three fields: surveying to lease current accuracies; intermediate distances of the order used in synchrotron installation with accuracies to micro inches; and machine tool areas of measurement in terms of inches to micro-inch accuracy. Electron beam equipment for selective evaporation, thin film circuitry, similar work. Manufacturer, importer, exporter. Hilger & Watts, 98 St. Pancras Way, Camden Town, London, N.W.1, England. WTD 1/30/63. I.R. 66.★

382 Instruments for Measuring, Controlling, Indicating Physical Characteristics

AUSTRALIA—Electronic counters for electricity producing power stations. Fred A. Boughey Associates (importer, exporter), P.O. Box 4985 G.P.O., Sydney. WTD 2/10/64.

CHILE—Humidity moisture testers for fish meal. Flores, Iversen y Labra Ltda. (importers, wholesalers, sales agents), Moneda 812, Casilla 13550, Santiago. WTD 6/19/64.

★★ UNITED KINGDOM—Trade Mission

Control, measuring, testing equipment and instruments; manufacturing equipment or processes used in these industries. Agency or manufacturers' representatives. Gordon H. Leonard and Deane Narayn, Associates, Leonard & Narayn Associates, 57 Fairholme Rd., West Croydon, Surrey, England. NCIA. I.R. 164.

Equipment and test instruments in air navigation and communication areas. Mr. J. S. Crick, Manager, Fieldtech Ltd., No. 2 Maintenance Area, London Airport, London, England. WTD 4/9/63. I.R. 105.

Quality industrial instrumentation. Manufacturer. P. A. Bennett, Managing Director, P. Allen Bennett Ltd., Specon Works, 81 Sidney St., Sheffield, Yorkshire, England. NCIA. I.R. 76.

Temperature measurement and control equipment. D. S. Morgan, Owner, D. S. Morgan, 24 Broughton Rd., Orpington, Kent, England. NCIA. I.R. 132.

Analytical instruments for chemical laboratories, process control equipment. Importer. A. L. W. Meyvis, Managing Director, Meyvis & Co. N.V., P. Turcqstraat 2, Bergen op Zoom, Holland. NCIA. I.R. 166.

Control components. Representative. R. I. T. Stubbings, Managing Director, Jay R Industrial Sales Ltd., Arcade Chambers, Bognor Regis, Sussex, England. I.R. 127.

Dereeling and tension indicators and controllers for high speed fine wire winding. Nigel A. Soloman, Executive Director, ERG Industrial Corp. Ltd., Luton Rd., Dunstable, Bedfordshire, England. I.R. 195.

Agency, with view to a later manufacturing license, in the following lines: electronic level control equipment; flow metering, conveyor counting, batching and control; automatic control and sequencing of actuators for material handling; electronic temperature, pressure and humidity recorders and controllers; general process control equipment. R. M. Bentley, Sales Director, Mr. D. Hargreaves, Managing Director, Oak Jig & Tool Co. Ltd., Acre Street Works, Hollinwood, Oldham, Lancashire, England. I.R. 208.

Line of electronic marine navigation instruments: chart recorders, fathometers, logging equipment for small boat markets to complement its current line. Manufacturer. D. R. Willmott, Technical Director, Perdio Electronics Ltd., Brownhill St., London, E.C.2, England. I.R. 92.

Control, sensing, programming equipment and components. Agency with a possibility for licensing arrangements. G. Garzino, Director, Trans World Organization, Via Bagnasco 14, Torino, Italy. NCIA. I.R. 100.★

Electronic instruments. Manufacturers' representatives. G. Glatz, Dipl Ingenieur ETH, G. Glatz & Co., Seebahnstrasse 109, Zurich 36, Switzerland. NCIA. I.R. 159.

Manufacturing process control devices, subsystems with automation significance electronically oriented. Manufacturer. Sterling Industries (group management) Ltd., Sterling Works, Crewkerne, Somerset, England. I.R. 95.

Instrumentations and process control equipment for iron, steel, shipbuilding, electronics, chemical industries; also for office machinery. Manufacturers' agent. ETA Electrical Co., 22 Pitt St., Glasgow, C.2, Scotland. I.R. 36.

Aircraft instruments; hydraulic devices, related instruments. Importer. C. T. London Ltd., 27 Ashley Place, London, S.W.1, England. WTD 12/23/63. I.R. 148.

383 Optical Instruments, Lenses

AUSTRALIA—Recording spectrophotometers for nuclear research. Fred A. Boughey Associates (importer, exporter), G.P.O. Box 4985, Sydney. WTD 2/10/64.

384 Surgical, Medical, Dental Instruments

BELGIUM—Medical, hospital equipment; including oxygen breathing apparatus, oxygen cardiograph apparatus of special design (small equipment especially). Direct purchase and agency. Ets. Hospithera (importer, exporter), 64 Rue Coenraedts, Brussels 6. WTD 10/10/63.

● **CEYLON**—Caster-mounted baby incubator approx. 36″ high, 32″ long, 18″ wide, with mesh carrying basket, thermometer and safety

devices. Bid deadline September 4. The Chairman, Tender Board, Ministry of Health & Housing, P.O. Box 500, Colombo.★ (Telephone: 202-WO 7-2939).

FRANCE—Dental equipment and instruments; dental supplies such as gypsum products, impression materials, plaster, stones, porcelain teeth, resinous teeth, waxes. Requests replies in French. Societe Dentalex (importer, wholesaler), 24 Rue Godot-de-Mauroy, Paris 9e.

Surgical and medical instruments of a novelty character. Direct purchase and agency. Ets. Chevalier Freres (manufacturer), 5 Place de l'Odéon, Paris 5e. WTD 5/8/64.

GERMANY—Veterinary instruments, apparatuses. Direct purchase and agency. Curt Vogel (wholesaler, manufacturer), Stuttgart-S, Weissenburgstrasse 29. WTD 1/16/64.

● **IRAQ**—Supply of various types of dental instruments, equipment, including but not limited to 1500 medicament bottles, 150 cotton pellet holders, 250 reels floss silk, 600 plasting filling instruments, 150 doz. pulp canal cleanser, 300 double ended excavators, 1200 bottles silver alloy. Tender No. 28/64, bid deadline August 9. Central Foreign Purchasing Board, Ministry of Finance, Baghdad.★ (Telephone: 202-WO 7-2939).

★★ UNITED KINGDOM—Trade Mission

Medical instruments. Importer. A. L. W. Meyvis, Managing Director, Meyvis & Co. N.V., P. Turcqstraat 2, Bergen op Zoom, Holland. NCIA. I.R. 166.

Electrical devices, in safety and/or signalling fields for petroleum, mining, chemical, process industries; also gas and construction industries. Representative, manufacturer. D. C. Wilkins, Manager, Industrial Div., John Davis & Son (Derby) Ltd., All Saints Works, Derby, England. WTD 2/17/64. I.R. 156.

Medical instrumentation selling at $3000 and above, of unique or advanced design. Importer. W. A. Broad, Sales Manager, Hawksley & Sons Ltd., North Rd., Lancing, Sussex, England. WTD 1/16/64. I.R. 150.★

385 Ophthalmic Goods

BELGIUM—Sun glasses. Direct purchase and/or exclusive agency. Ets. Benoidt (agent), 136 Rue des Atrebates, Brussels.

386 Photographic Equipment

BELGIUM—Automatic strip film projectors which can be synchronized with tape recorders or records. La Compagnie Europeenne S.C. (importer), 79 Av. Paul Janson, Brussels. WTD 6/15/64.

FRANCE—Cameras, photographic equipment, supplies. Direct purchase and agency. Requests replies in French. Societe Orto (photographer, retailer, wholesaler), 14 Rue Castaguary, Paris 15e.

● **VIET-NAM**—One blueprinting machine, accessories. Tender No. 1309-12064, bid deadline July 22. Central Purchasing Authority, 140 Hong Thap Tu, Saigon.★ (Telephone: 202-WO 7-2778).

394 Toys, Amusement, Sporting, Athletic Goods

BELGIUM—Toys, all types, including mechanical, paper; plastic structural sets; stuffed animals. Direct purchase and/or agency. Ets. Benoidt (agent), 136 Rue des Atrebates, Brussels.

GERMANY—All sorts of toys, sporting articles. Direct purchase and/or agency representation within the Federal Republic of Germany. Franz A. Dieler K.G. (wholesaler, importer, exporter, sales agent), 18 Buergerstrasse, 6 Frankfurt/Main. WTD 1/22/64.

PAKISTAN—Air guns, rifles. Sheikh Brothers, R-2 Nila Gumbad, Lahore. WTD 6/17/64.

SOUTH AFRICA—Toys. Requests illustrated literature, price sheets. Interested in good quality merchandise only. Toys 'n Tunes (importing distributor), Lower Parkade, Strand St., Cape Town.

★★ UNITED KINGDOM—Trade Mission

Mechanical toys. James E. Thomas, 49 Ayr Rd., Whitecraigs, Giffnock, Glasgow, Scotland. I.R. 42.

VENEZUELA—All types of toys: rubber; plastic; paper; mechanical; structural sets; balloons, stuffed animal toys; requests replies in Spanish. Direct purchase and agency. Importadora Harely Cia. de R. G. (importer, distributor), Edificio General Urdaneta, Marron a Pelota, Caracas. WTD 5/20/64.

395 Pens, Pencils, Office, Artists' Materials

BELGIUM—Pencils, all kinds, mechanical, nonmechanical; penholders. Direct purchase and/or agency. Papeterie D.G. (importer), 178-180 Rue G. Moreau, Brussels 7.

Ball point pens, assembled or unassembled. Direct purchase and/or agency. Adrian Macai (agent), 96 Rue Potagère, Brussels 3.

FRANCE—Self-copying carbon paper. Requests replies in French. Sapap—Societe Parisienne de Papiers (wholesaler), 55 Rue St. Didier, Paris 16e. WTD 10/20/62.

396 Costume Jewelry, Novelties, Buttons, Notions

BELGIUM—Advertising novelties, all kinds, including artificial flowers, except glass, priced from few cents to $3. Usines Saint Brice S.A. (manufacturer, exporter, retailer), Les Filatures des 3 Suisses S.A., Chaussée de Lille, Orcq, Tournai.

FRANCE—Jewelry, imitation, fancy and costume; related novelties; boutique giftwares. Direct purchase and agency. Requests replies in French from manufacturers only. Société Degrange & Cie. (wholesaler), 6 Place Fernand-Lafargue, Bordeaux, Gironde. WTD 6/22/64.

SOUTH AFRICA—Automobile safety belt buckles, fittings. Hercules Equipment (Pty) Ltd. (manufacturer), 14-16 Victoria Rd., Near Tollgate, Cape Town. WTD 6/16/64.

399 Manufacturing Industries

BELGIUM—Floor covering: hard surface printed base linoleum. Direct purchase and agency. Duromit S.A. (importer, installer), 36-38 Rue de la Gare, Brussels 14.

Advertising novelties, all kinds, rubber goods; paper items; priced from few cents to $3. Usines Saint Brice S.A. (manufacturer, importer, retailer), Les Filatures des 3 Suisses S.A., Chaussée de Lille, Orcq, Tournai.

Advertising novelties, various. Direct purchase and agency. Requests replies from manufacturers. Adrian Maci (agent), 96 Rue Potagère, Brussels 3.

DENMARK—Premiums for chewing gum packages. Dansk Tyggegummifabrik A/S (DNADY), (manufacturer, exporter), 2 Enghavevej, Vejle. WTD 8/5/63.

FRANCE—Beauty, barber shop equipment; requests offers with price quotations from manufacturers only. Direct purchase and agency; requests replies in French or German. C. Pfeiffer (importer, retailer, manufacturers' representative), 18 Rue Fischart, Strasbourg (Bas-Rhin).

NORWAY—Advertising novelties. Direct purchase and agency. Chr. Farup (manufacturer's agent, importing wholesaler), Dronningensgate 32, Oslo. WTD 6/10/64.

Paper napkins, Xmas wrappings, paper punches, rulers, other office supplies. Direct purchase and agency. Snorre A/S (importer, wholesaler, manufacturer's agent), 34 Thv. Meyersgate, Oslo.

SOUTH AFRICA—Tobacco pipes, cigarette holders, allied smokers' requisites. Ch. Abelsohn (Pty.) Ltd. (importing distributor), 26 Sir Lowry Rd., Cape Town. WTD 6/15/64.

★★ UNITED KINGDOM—Trade Mission

Commercial tile for use with wood floors, asphalt, cement, subflooring, walls. Contractor. Robin Johnstone, Marketing Manager, John Broadfoot & Sons, 11 Claremont Gardens, Glasgow, C.3., Scotland. I.R. 55.

Window blinds for home, institution, commercial use. J. Rawich, Director, Antiference Ltd., Aylesbury, Buckinghamshire, England. WTD 2/3/64. I.R. 86.★

Gas stoves, camping, outdoor equipment. Manufacturer. Leonard Trigg, Managing Director, Desmo Ltd., Pensnett, Brierley Hill, Staffs., England. I.R. 22.

Tantalum, preforms for capacitors, aluminum foil for capacitors, metals for resistors (metal film tape, etc.), transistor sub-assemblies, specialized solders. Agency. W. B. Johnson, Representative, Kingsley & Keith (Chemicals) Ltd., Rex House, 38 King William St., London, E.C. 4., England. WTD 3/26/63. I.R. 170.

509 Farm Products, Raw Material

GERMANY—Raw furs cif Hamburg. Harold Kolleng (importer, wholesaler), 18 Dusseldorfer Strasse, 6 Frankfurt/Main. WTD 6/11/64.

539 General Merchandise

SOUTH AFRICA—Men's civilian and military secondhand overcoats, good quality. H. Singer & Co. (importing distributor), 48 Caledon St., Cape Town.

731 Advertising

★★ UNITED KINGDOM—Trade Mission

Advertising agency desires clients in the fields of electronics, automotive and plastics. In the electronics field it provides full range of advertising and marketing services in the U.S. and Continental Europe. Central News Ltd., Pemberton House, East Harding St., London, E.C. 4. I.R. 185.

739 Business Services

★★ UNITED KINGDOM—Trade Mission

Seeks research organization to conduct survey of business opportunities in the U.S. for language teaching devices. G.W. Bowling, Director, Brookdeal Electronics, Myron Place, Lewisham, London, S.E. 13, England. I.R. 68.

Seeking agreements with U.S. firms to service, maintain, install industrial instrumentation and control equipment. T. S. Fowler, Divisional Manager, W.H. Smith & Co. Electrical Engineers Ltd., 68 Grosvenor St., Manchester 1, England. WTD 9/12/60. I.R. 125.★

Consultant wants U.S. connections. R. C. Hulbert, 49 Leadenhall St., London, E.C. 3, England. I.R. 207.

International Representation

The firms listed below are interested in representing U.S. firms in the areas indicated. Exclusive distributorship for these commodities is wanted only if specified.

012 Fruit, Tree Nut, Vegetable Farms

ENGLAND—Fresh fruits, vegetables, nuts; all kinds. A.K. Ballantine Ltd. (grower, importer), Guildford Rd., Woking, Surrey. WTD 4/21/64.

NORWAY—California almonds. Carl B. Proesch (commission agent), 7 Prinsensgate, Oslo.

019 Commercial Farms

IRAQ—Flower, vegetable seeds. Desires exclusive agency. Iraq Agricultural Co., W.L.L. (importer, wholesaler, agent), P.O. Box 3048, Basil Bldg., Abu Nawas St., Baghdad. WTD 6/15/64.

200 Food

BELGIUM—Veal, pork kidneys; calf sweetbreads; calf, pork liver; beef, calf tongues; cat and dog food. Courtrai-Salaisons (importer), 4 Place St. Leger, Lez Pecq (Hainaut).

203 Canning, Preserving Foods

SOUTH AFRICA—Canned foodstuffs, all kinds; salad dressings, bottled sauces, allied lines. Requests replies from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

204 Grain Mill Products

NORWAY—Yeast, wheat germ for animal feed. Interested in exclusive agency. Requests replies from manufacturers only. Hans Claussen (manufacturer's agent), P.O. Box 44, Bergen.

207 Confectionery

SOUTH AFRICA—Chocolates, candy; requests replies from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

220 Textile Mill Products

FRANCE—Upholstery fabrics, all kinds; bedspreads. Ets. Maurice Decroix (manufacturer, importer, exporter), 11 Rue Diaz, Boulogne (Seine). WTD 4/29/64.

NORWAY—Fabrics of manmade fibers, blends; laminates; foam-backed fabrics; specialty products not available from European sources. For sale mainly to garment manufacturing industry. H. Chr. Mo (manufacturers' agent), 1 Torggaten, Oslo.

SOUTH AFRICA—Fabrics, laces, all types, for women's underwear; medium-priced fabrics for women's cocktailwear. Requests replies from mills only. D.S.M. MacDonald (Pty.) Ltd. (manufacturers' agent), P.O. Box 2494, Cape Town. WTD 10/24/63.

Fabrics, all types, for upholstery trade. Requests replies from mills or their sole export houses. M. Abrahamson (manufacturers' agent), P.O. Box 4112, Cape Town. WTD 6/5/64.

Synthetic pile fabrics, all types; piece goods of natural and synthetic yarns and fibers, including mixtures in blended fabrics, for women's outerwear, underwear. Desires exclusive agency on 5% commission basis. Dominion Export & Indent Agents (manufacturers' agents), P.O. Box 1195, Cape Town.

221 Broad Woven Fabric Mills, Cotton

SOUTH AFRICA—Cotton textiles, plain, printed, suitable for outerwear, underwear. Requests replies from mills or their sole export houses. Claude Karstel & Co. (manufacturers' agent), P.O. Box 1657, Cape Town. WTD 12/1/61.

222 Broad Woven Fabric Mills, Manmade Fiber, Silk

NORWAY—Textile piece goods of manmade fibers or blends, for manufacturing men's, women's, children's clothing. Especially interested in stretch fabrics. Requests replies from manufacturers only. Oluf B. Andreassen (manufacturer's agent), 8B Huitfeldtsgate, Oslo.

SOUTH AFRICA—Synthetic fabrics, plain, printed, suitable for outerwear, underwear. Requests replies from mills or their sole export houses. Claude Karstel & Co. (manufacturers' agent), P.O. Box 1657, Cape Town. WTD 12/1/61.

223 Broad Woven Fabric Mills, Wool

SOUTH AFRICA—Piece goods, woolen and worsted, for apparel. Requests replies from mills or their sole export houses. Claude Karstel & Co. (manufacturers' agent), P.O. Box 1657, Cape Town. WTD 12/1/61.

Woolen dress fabrics, winter weights, 58/60″ widths; requests attractively mounted samples, prices, agent's commission from mills only. Mill Agents South Africa (Pty.), Ltd. (manufacturers agent), P.O. Box 3161, Cape Town. WTD 6/14/63.

225 Knitting Mills, Products

BELGIUM—Bathing suits, knit for men, women, children. Beatic S.P.R.L. (importer), 60 Chaussee d'Ixelles, Brussels 5.

SOUTH AFRICA—Knitted fabrics suitable for manufacturing trade. Requests replies from mills or their sole export houses. Claude Karstel & Co. (manufacturers' agent), P.O. Box 1657, Cape Town. WTD 12/1/61.

227 Floor Covering Mills, Products

FRANCE—Tufted carpet. Ets. Maurice Decroix (manufacturer, importer, exporter), 11 Rue Diaz, Boulogne (Seine). WTD 4/29/64.

229 Textile Goods

SOUTH AFRICA—Piece goods: dacron, dacron/acetate (over 55% dacron), cotton; foamback coat fabrics; for production of women's wear. Men's fine pin-stripe dacron/cotton shirtings. Men's suitings, 58/60″ widths, 10/12 oz. weight. Desires quality products only; requests attractively mounted samples, prices, weights per yd., agent's commission from mills only. Mill Agents South Africa (Pty.), Ltd. (manufacturers' agent), P.O. Box 3161, Cape Town. WTD 6/14/63.

Fishing nets: large and medium sizes for anchovy commercial deep sea fishing; exclusive agency on 10% commission basis desired. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

230 Apparel

BELGIUM—Men's dress, sport shirts; woven bathing suits for boys; misses'; woven bathing suits for men, boys. Exclusive agency. Beatic S.P.R.L. (importer), 60 Chaussee d'Ixelles, Brussels 5.

249 Wood Products

SOUTH AFRICA—Household wood products including lunch baskets for picnics; giftware such as bar accessories, ashtrays, vases, bowls. Requests replies from manufacturers only. Hermann's Agencies (Pty.), Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

251 Household Furniture

BARBADOS, W.I.—Metal beds, springs, low and medium prices. Desires exclusive agency. Stokes & Bynoe Ltd. (commission agent), P.O. Box 401, Bridgetown. WTD 12/30/63.

254 Partitions, Shelving, Lockers, Office, Store Fixtures

NORWAY—Display forms, figures; store fixtures for supermarkets. Nesseies Butikkutstyr (manufacturer's agent), 1 Rosenkrantz plass, Oslo.

264 Converted Paper, Paperboard Products

BELGIUM—All kinds of stationery store articles. Exclusive agency. Sablon S.A. (importer, dealer), 354 Chaussee d'Alsemberg, Brussels.

Gummed tape, for distribution in Benelux countries. Interested in exclusive agency. Ets. Antoine J. Rose S.P.R.L (importer, manufacturer), 20 Oudaan, Antwerp WTD 3/31/64.

281 Industrial Chemicals

FRANCE—Raw chemical products for plastics and rubber industries. Societe Graham (importer, dealer), 146 Ave. des Champs Elysees, Paris 8e. WTD 4/13/64.

TURKEY—Caustic soda, soda ash, acids. Isak V. Salti (sales agent), Piyasa Han, Asirefendi Caddesi, Istanbul. WTD 8/20/63.

282 Synthetic Materials

TURKEY—Polystyrene plastics, polyvinyl chloride, plasticizers. Isak V. Salti (sales agent), Piyasa Han, Asirefendi Caddesi, Istanbul. WTD 8/20/63.

283 Drugs

BELGIUM—Pharmaceutical products, general line. Requests replies from manufacturers. Ets. A. de Bournonville & Fils S.A. (importers, distributors), 30-38 Rue aux Fleurs, Brussels. WTD 7/17/63.

284 Soaps, Detergents, Cleaning Preparations, Perfumes, Cosmetics

BELGIUM—Cosmetics, toiletries such as face powder, cosmetic powders; new lines of cleansing creams, lip preparations, oils, rouges, eye shadow; after-shave and other lotions, bath oils, bath salts, bubble bath products,

hair tonics, hair dyes, rinses, tints. Desires exclusive agency or distributorship. A.G.M. (Richard Henry) (distributor), 18 Ave. J. B. Charlier, Hoeilaart. WTD 2/25/63.

FRANCE—Automobile polishes, cleaners. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

Cosmetics, toilet preparations to be sold in chemists' shops. Requests replies in French. Laboratoires Goupil (manufacturer), 30 Ave. du President Wilson, Cachan (Seine). WTD 6/1/64.

287 Agricultural Chemicals

IRAQ—Insecticides, pesticides, fungicides. Exclusive agency. Iraq Agricultural Co. W.L.L. (importer, wholesaler, agent), P.O. Box 3048, Basil Bldg., Abu Nawas St., Baghdad. WTD 6/15/64.

306 Fabricated Rubber Products

BELGIUM—Pressure sensitive rubber or rubberized tape, for sale in Benelux countries. Interested in exclusive agency. Ets. Antoine J. Rose S.P.R.L. (importer, manufacturer), 20 Oudaan, Antwerp. WTD 3/31/64.

FRANCE—Automobile seating: latex foam sponge rubber. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

307 Plastics Products

SOUTH AFRICA—Plastic tableware; plastic household wares, all types. Requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.), Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

315 Leather Gloves

BELGIUM—Welders' leather gloves. Urtex S.P.R.L. (manufacturer, importer), 7 Bourgondiestraat, Oudenaarde.

322 Glass, Glassware

BELGIUM—Glassware for laboratory use. Henri Segers (manufacturer), 277 Rue du Velodrome, Retinne.

SOUTH AFRICA—Glass tableware; decorative glassware; low and medium price types. Desires exclusive agency on 7½% commission basis. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

SOUTH AFRICA—Heat-proof oven glassware; requests replies from manufacturers or their sole export houses. M. Abrahamson (manufacturers' agent), P.O. Box 4112, Cape Town. WTD 6/5/64.

326 Pottery, Related Products

SOUTH AFRICA—Vitreous china, earthenware food utensils; pottery products; decorated china. Requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.), Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

Crockery, low and medium price types; desires exclusive agency on 7½% commission basis. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

335 Rolling, Drawing, Extruding of Nonferrous Metals

FRANCE—Copper alloys bars, sheets, plates, other semi-finished products, for manufacture of all types of goods: furniture, lighting devices, navy and aviation engines. Exclusive agency. Requests replies in French. Ets. Henri Dagot (importer, dealer, agent), 26 Rue des Fosses St-Bernard, Paris 5e. WTD 4/27/64.

342 Cutlery, Hand Tools, General Hardware

CHILE—Builders' hardware; exclusive and nonexclusive agency. Bruno Norenberg U. (sales agent), Carlos Fernandez 260, Casilla 9429, Santiago. WTD 6/22/64.

FRANCE—Hand tools for automobile body work. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

ITALY—Furniture fixtures, tool kits, hand tools, power driven. Compagnia Genovese D'Esportazione S.r.l. (wholesaler, agent, importer, export), Via L. Garaventa 2, Genova.

NORWAY—Hand, edge tools; files; drills. Brodrene Thowsen A/S (manufacturer's agent), 12 Tollbodgaten, Oslo. WTD 3/18/64.

SOUTH AFRICA—Table, kitchen, butchers' cutlery; pocket knives, scissors, shears, tinners' snips; manicure implements, scissors; vacuum bottles, jugs. Requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

Mechanics' hand tools; requests replies from manufacturers only. Harold H. Jones & Co. (Pty.) Ltd., (manufacturers' agent), 28 St. George's St., Cape Town.

Cabinet hardware, low to medium priced. Requests replies from manufacturers or their sole export houses. M. Abrahamson (manufacturers' agent), P.O. Box 4112, Cape Town. WTD 6/5/64.

346 Metal Stampings

BELGIUM—Metal closures for glass containers. Requests replies from manufacturers. Henri Segers (manufacturer), 277 Rue du Vélodrome, Retinne.

SOUTH AFRICA—Cast iron cooking utensils; requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

Vitreous enameled utensils, stamped and spun, for hospital, cooking, kitchen, household uses; kitchen aids, gadgets, tool sets, novelties. Requests replies from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

348 Fabricated Wire Products

SOUTH AFRICA—Wire products, all kinds, for household, office use. Requests replies from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

352 Farm Machinery

CHILE—Complete line of farm machinery, equipment. Sociedad General de Comercio., S.A. (importer, wholesaler, sales agent), Alameda B. O'Higgins 1170, Casilla 904, Santiago. WTD 6/18/64.

IRAQ—Chemical sprayers, small irrigation pumps, garden tools, poultry brooders, incubators, feeders, small farm implements, tractor attachments. Exclusive agency. Iraq Agricultural Co., W.L.L. (importer, wholesaler, agent), P.O. Box 3048, Basil Bldg., Abu Nawas St., Baghdad. WTD 6/15/64.

353 Construction Machinery

CHILE—Construction, excavating, maintenance machinery, equipment; power cranes, shovels, draglines, pullshovels, backhoes, mixers, pavers, crushers, pulverizers, hammermills; screening, washing plants. Mining machinery and equipment, complete line. Sociedad General de Comercio S.A. (importer, wholesaler, sales agent), Alameda B. O'Higgins 1170, Casilla 904, Santiago. WTD 6/18/64.

SPAIN—Mining machinery, equipment, supplies; all types. Requests replies in Spanish. Mainco, 7 Marques de Pidal, Oviedo. WTD 6/15/64.

THAILAND—Complete range of heavy duty earth moving, construction equipment. Requests replies from manufacturers only. Exclusive agency. Italthai Industrial Co., Ltd. (importer, wholesaler, manufacturer, retailer), 39/7 Rajdamnern Ave., Bangkok. WTD 6/7/63.

354 Metalworking Machinery

FRANCE—Accessories, tools, equipment for automobile repairing, maintenance. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

SOUTH AFRICA—Automotive maintenance equipment such as aligners, tune-up instruments and gauges, lubrication equipment; requests replies from manufacturers only. Harold H. Jones & Co. (Pty.) Ltd., (manufacturers' agent), 28 St. George's St., Cape Town.

355 Special Industry Machinery

BELGIUM—Glass blowers for making laboratory equipment. Requests replies from manufacturers. Henri Segers (manufacturer), 277 Rue du Vélodrome, Retinne.

FRANCE—Biscuit making machines, equipment; sharing, weighing machines. Societe Internationale de Contruction, Exportation & Importation de Machines pour l'Alimentation (manufacturer, importer, dealer), 34 Ave. Paul Doumer, Rueil-Malmaison (Seine & Oise).

NETHERLANDS—First-class special-type mills to grind technical D.D.T. (90%), capacity appr. 1,000 lb./hr., particles smaller than 40 microns. Requests catalogues, list prices, c.i.f. Rotterdam. Not interested in second-hand commodities. Desires exclusive agency. Requests replies from manufacturers only. N.V. Technische Handelsonderneming "COIMEX-Vlaardingen" (importer, commission merchant, exporter), Veldweg 11, Hattem.

TURKEY—Bobbins, V-belts, rubber parts for textile machinery. Isak V. Salti (sales agent), Piyasa Han, Aşirefendi Caddesi, Istanbul. WTD 8/20/63.

356 General Industrial Machinery

NETHERLANDS—First-class small fans with very high r.p.m. for application in aircraft. Requests catalogues, list prices c.i.f. Rotterdam. Not interested in second-hand commodities. Desires exclusive agency. Requests replies from manufacturers only. N.V. Technische Handelsonderneming "COIMEX-Vlaardingen" (importer, commission merchant, exporter), Veldweg 11, Hattem.

357 Office, Computing, Accounting Machines

BELGIUM—Tape dispensers for sale in Benelux countries. Interested in exclusive agency. Ets. Antoine F. Rose S.P.R.L. (importer, manufacturer), 20 Oudaan, Antwerp. WTD 3/31/64.

358 Service Industry Machines

FRANCE—Industrial laboratory equipment including air-conditioners. Ets. Quintard & Cie

(manufacturer), 67 Rue de la Croix-Nivert, Paris 15e. WTD 3/31/64.

360 Electrical Machinery, Equipment, Supplies

NETHERLANDS—First-class sealed relays, sensitive relays, other special-type electric relays. Program switches, timers, other special-type parts for fully automatic household washing machines. Centrifugal starting switches, rotor and stator, for single-phase induction motors, 6A-250 V, diameter rotor shaft 19 or 22 mm. Requests catalogues, list prices c.i.f. Rotterdam. Not interested in second-hand commodities. Desires exclusive agency. Requests replies from manufacturers only. N.V. Technische Handelsonderneming "COIMEX-Vlaardingen" (importer, commission merchant, exporter), Veldweg 11, Hattem.

364 Electric Lighting, Wiring Equipment

FRANCE—Automobile sealed-beam lamps. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

365 Radio, Television Receiving Sets

BELGIUM—Phonograph records, all kinds. Exclusive agency. Schott Freres S.P.R.L. (editor, importer, retailer), 30 Rue St. Jean, Brussels. WTD 6/18/64.

366 Communication Equipment

SOUTH AFRICA—Most modern type closed circuit commercial television equipment; films, for same; suitable for use on more than one floor of a building, for factory use. Desires exclusive agency on 10% commission basis. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

371 Motor Vehicles, Motor Vehicle Equipment

CHILE—Motor vehicle spare parts, accessories, tools, maintenance machinery and equipment. Sociedad General de Comercio S.A. (importer, wholesaler, sales agent), Alameda B. O'Higgins 1170, Casilla 904, Santiago. WTD 6/18/64.

FRANCE—Automotive replacement parts. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

380 Professional, Scientific, Controlling Instruments

NETHERLANDS—Audio-visual aids. Interested in exclusive agency. Meijlink N.V. (importer), Delftsestraat 27, Rotterdam. WTD 6/1/64.

381 Engineering, Laboratory, Scientific, Research Instruments

CHILE—Scientific and laboratory apparatus, instruments, supplies. H. Kaufmann y Cia. Ltda. (importer, wholesaler, sales agent), Santa Rosa 71, Casilla 2664, Santiago. WTD 6/19/64.

FRANCE—Industrial laboratory furnaces. Exclusive agency. Requests replies in French. Ets. Henri Dagot (importer, dealer, agent), 26 Rue des Fosses St-Bernard, Paris 5e. WTD 4/27/64.

Industrial laboratory equipment: furnaces, drying equipment, hot air generators. Ets. Quintard & Cie (manufacturer), 67 Rue de la Croix-Nivert, Paris 15e. WTD 3/31/64.

382 Instruments for Measuring, Controlling, Indicating Physical Characteristics

NETHERLANDS—First-class quality flow meters (water) for homes; protective devices for natural gas appliances. Requests catalogues, list prices c.i.f. Rotterdam. Not interested in second-hand commodities. Desires exclusive agency. Requests replies from manufacturers only. N.V. Technische Handelsonderneming "Coimex-Vlaardingen" (importer, commission merchant, exporter), Veldweg 11, Hattem.

384 Surgical, Medical, Dental Instruments, Supplies

BELGIUM—Protective clothing, all types. Urtek S.P.R.L. (manufacturer, importer), 7 Bourgondiestraat, Oudenaarde.

SOUTH AFRICA—Automobile safety belts. Hercules Equipment (Pty.) Ltd. (manufacturer), 14-16 Victoria Rd., Near Tollgate, Cape Town. WTD 6/16/64.

Surgical instruments, all types; general hospital equipment. Haelen Surgical Services (Pty.) Ltd. (agency), P.O. Box 7545, Johannesburg.

386 Photographic Equipment

NETHERLANDS—Photographic, cinematographic equipment. Desires exclusive agency. Meijlink N.V. (importer), 27 Delftsestraat, Rotterdam. WTD 6/1/64.

SOUTH AFRICA—Cameras; film: black and white; color developing and printing equipment; photographic supplies. Desires exclusive agency on 10% commission basis. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

387 Watches, Clocks

FRANCE—Automobile clocks. Requests replies in French. Augustin Bataille (manufacturer, importer, dealer), 13 Rue du Landy, Clichy (Seine). WTD 7/2/63.

391 Jewelry, Silverware, Plated Ware

SOUTH AFRICA—Electrosilver-plated hollow ware; electrosilver-plated baby goods, novelties, toiletware, trophies; electrosilver-plated and stainless steel domestic flatware; requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

393 Musical Instruments, Parts

BELGIUM—Musical instruments, all kinds. Exclusive agency. Schott Freres S.P.R.L. (editor, importer, retailer), 30 Rue St. Jean, Brussels. WTD 6/18/64.

394 Toys, Amusement, Sporting Goods

BELGIUM—All kinds of plastic toys. Exclusive agency. Sablon S.A. (importer, dealer), 354 Chaussee d'Alsemberg, Brussels.

Gymnasium equipment for sale in Belgium. Requests replies from manufacturers. De Man Nieuwekuis (proprietor, dry cleaning shop), 129 Markt, Deinze.

SOUTH AFRICA—Games, toys, new types; sporting, athletic goods; fishing tackle, equipment; requests replies from manufacturers only. Hermann's Agencies (Pty.), Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

Toys: mechanical, electrical, educational; novelties, all types, but new ideas only. Desires exclusive agency on commission basis; 10% on toys, 7½% on novelties. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

395 Pens, Pencils, Office, Artists' Materials

BELGIUM—Office supplies, industrial markers, other industrial consumer goods. Interested in exclusive agency for Benelux countries. Beeckmans & Veys (distributor), 46-50 Van Luppenstraat, Antwerp. WTD 6/14/63.

SOUTH AFRICA—Crayons; nonmechanical pencils, black lead, others; requests replies from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

396 Costume Jewelry, Novelties, Buttons, Notions

SOUTH AFRICA—Men's cuff links, tie pins; women's artificial jewelry: necklaces, brooches, earrings. Desires exclusive agencies on 10% commission basis. Dominion Export & Indent Agents (manufacturers' agent), P.O. Box 1195, Cape Town.

399 Manufacturing Industries

BELGIUM—Novelties, general line, for use as gift items. Not interested in small gadgets. Ets. Charu (importer), 68 Rue Aug. Gevaert, Brussels.

SOUTH AFRICA—Umbrellas, parasols, walking canes; tobacco pipes, cigarette holders, allied smokers' requisites; requests descriptive literature, price sheets from manufacturers only. Hermann's Agencies (Pty.) Ltd. (manufacturers' agent), P.O. Box 2636, Cape Town.

New Trade Lists

The Bureau of International Commerce, Commercial Intelligence Division, has published the following new trade lists of which mimeographed copies may be obtained by firms domiciled in the United States from the Commercial Intelligence Division and from Department of Commerce Field Offies. The price is $1 a list for each country.

Most of these lists are prefaced by a brief review of basic trade and industry data collected in making the compilations. All are dated May.

Automotive Vehicle and Equipment Importers and Dealers—Japan.
Meat Packing, Sausage and Casings—Australia.
Meat Packing, Sausage and Casings—Denmark.
Metallurgical and Metal Working Plants—Federal Republic of Germany and West Berlin.
Paint, Varnish and Pigment Importers, Dealers and Manufacturers—Brazil, June.
Seed and Bulb Importers, Dealers and Exporters—Japan.
Textile Industry—Mexico.

Visiting Buyers and Officials

Scheduled arrival dates and U.S. addresses indicated.

AUSTRALIA—Fred G. Krebs, representing B.S.P. Industries (N.S.W.) Pty. Ltd., 116-120 Kippax St., Sydney, N.S.W., interested in obtaining representation of U.S. firms for **plants** and **industrial processes** in Australia and southeast Asia; prepared to act as agents to undertake necessary design work for adaptation to local conditions, to supervise production and construction and to provide **consulting services** on joint projects. July 24 via New York for 2 weeks or longer if warranted. c/o General Delivery, Grand Central Station P.O., New York, N.Y. Itinerary: New York, Chicago, Denver, Los Angeles, San Francisco.

J. L. Longhurst, representing Adept Nameplates Pty. Ltd., 29 Seddon Ave., Bankstown, N.S.W., interested in manufacture of **nameplates** and requesting technical information for same. July 22 via Honolulu for 6 weeks. c/o Department of Commerce Field Offices in itinerary. Itinerary: Los Angeles, Chicago, New York.

A. E. Robertson, Works Manager, Falkiner Chains Pty. Ltd., Box 19, Post Office, Woolloongabba, Brisbane, interested in special **machinery** used in **chain manufacturing.** July 19 via New York for one week. c/o Department of Commerce Field Offices in itinerary. Itinerary: New York, Philadelphia, Chicago, San Francisco.

Edward Cecil Fison, Dept. of Harbours & Marine, Government of Queensland, 89 Hillside Crescent, Hamilton, Brisbane, interested in **ports** and **harbors** and requesting technical information on port layout, loading equipment, dredging and maintenance, administration. July 28 via New York for 2 months. c/o Department of Commerce Field Offices in itinerary. Itinerary: New York, Boston, Baltimore, Mobile, New Orleans, Houston, Galveston, Washington, Chicago, Los Angeles, San Francisco.

CHILE—Rodolfo Heymann, representing self, Rebeca Matte 65, Santiago, interested in **visiting showrooms** and **factories** of **commercial installations, furniture** and **related lines of interior decoration;** also requesting technical **information on new machinery, materials and trends.** Here for 5 weeks. c/o Department of Commerce Field Offices in itinerary. Itinerary: Los Angeles, Honolulu, San Francisco, Portland, Seattle.

CONGO—Samuel Locau, representing Comptoir Commercial et Industriel Congolais & Butransaf ("C.C.I.C."), B. P. 7857, Leopoldville, interested in contacting exporters of: **automotive spare parts, tires, vehicles, construction material; consumer goods such as clothing and food items;** in addition, **shippers.** July 27 via New York for 10-15 days. c/o Hands Co., 322 W. 21st St., New York, N.Y. 10011. Itinerary: New York.

ECUADOR—Gonzalo Aguilar Gonzalez, representing Importadora Automotriz C. A., Blvd. 9 de Octubre 809-811 (P.O. Box 3507), Guayaquil, interested in importing general **automotive parts** and **accessories,** especially **asbestos brake lining in coils and sets.** Here to September 22. c/o Sheraton-Atlantic Hotel, Broadway & 34th St., New York, N.Y. Itinerary: Miami, New York, Chicago, New Orleans.

ENGLAND—A. C. Anselm, Managing Director, Creators Group of Companies Ltd., Albert Drive, Sheerwater, Woking, Surrey, interested in **appointing agents** and **distributors in U.S. for: flexible piping and hose; glass fiber light fittings** and **decorative panels; plastic bindings for books and catalogs.** July 20 via New York for one month. c/o Mr. Lester W. Rubin, 444 Madison Ave., New York, N.Y. Itinerary: Detroit, Chicago, New York, various cities in New Jersey and Delaware.

FRANCE—Jean Luc Clavel, representing Tacussel-SOLEA, 2-4 Rue Carry, Lyon 3, (Rhone), interested in **finding an agent for distributing electronic equipment used in electro-chemistry.** Here for 2 months. c/o: French Embassy, Commercial Counselor's Office, 1001 Connecticut Ave., NW., Washington, D.C. 20036; French Consulate General, 1919 Outpost Dr., Los Angeles, Calif.; French Consulate General, 740 Taylor, San Francisco, Calif. Itinerary: Pittsburgh (July 10-16), Seattle (July 22-25), Anchorage (July 26-30), Portland (July 31-Aug. 1), San Francisco (Aug. 2-9), Los Angeles (Aug. 9-16), Arizona (Aug. 17-20), New Orleans (Aug. 24-26), Chapel Hill, N.C. (Aug. 28), Washington (Aug. 28-30), Boston (Aug. 30-Sept. 2), New York (Sept. 3-6).

F. Creuzot, Consulting Engineer and Manager, Societe ATF—Applications Thermiques et Frigorifiques, 12 Rue Grange Bateliere, Paris 9, interested in contacting U.S. manufacturers of **industrial type air conditioning** and **refrigeration equipment, reciprocatng compressors** and **fittings** with a view to obtaining representation or licensing agreements for above equipment. Here for 2 weeks. c/o Mrs. Levi, 1 W. 64th St., New York, N.Y. Itinerary: New York.

Francois Douchet, representing Societe de Produits Chimiques d'Auby, 46 Rue Jacques Dulud, Neuilly (Seine), interested in manufacture of **organic chemicals, particularly specialized products in the amino group;** requesting technical information on **outlets** and **supply of raw material.** Here for 6 weeks. c/o Cass, 306 Shathmore Drive, Syracuse, N.Y. Itinerary: New York, San Francisco, Washington, Dallas.

GERMANY—Karl-Heinz Brandes, representing Automatengesellschaft Elevend mbH & Co., 123-125 Winkelsweg, 4018 Langenfeld/Rhld., interested in **vending machines for bottles, food and soft drinks.** Here for 4 weeks. c/o New York Hilton at Rockefeller Center, 1335 Avenue of Americas, New York, N.Y. Itinerary: New York, Chicago, Kansas City, San Francisco, Los Angeles, New Orleans, Miami.

IRAN—Keykhosro Akhoundzadeh, Managing Director, Irandyne Trading Co., Ltd., 485 Ave. Saadi, Tehran, interested in representing U.S. manufacturers of **ball bearings, transmission implements, electrical equipment, industrial plant machinery, trucks, cars and tires.** July 20 via New York for 2 weeks. c/o Department of Commerce Field Office, Empire State Bldg., 350 Fifth Ave., New York, N.Y. 10001 Itinerary: New York.

NEW ZEALAND—Alan Hunter Malcolm, representing Waitemata County Council, A.B.C. Bldg., Karangahape Rd., P.O. Box 5440, Auckland, interested in **cement** and **bitumen stabilization of road pavements; low cost roading;** requesting technical information on **field construction practices.** Here for 7 weeks. c/o New Zealand Consulate General, 630 Fifth Ave., Suite 530, New York, N.Y. Itinerary: San Francisco, Los Angeles, Dallas, Chicago, New York, Washington, St. Louis.

PERU—Ernesto Lanata Piaggio, representing Cemsa Mercantil S.A., 2037 Av. Arenales, Lima, interested in **cigarette** and **tobacco products** in relation to the Peruvian market. Here to middle September. c/o Department of Commerce Field Offices in itinerary. Itinerary: New York, possibly Philadelphia, San Francisco, Los Angeles.

SPAIN—Jose Selva Vallbona, representing Casa Selva, 27 de Enero 74, Badalona, Barcelona, interested in exclusively representing a U.S. company in import of **commercial refrigeration units, especially tunnel and blast freezers** and requesting technical information on same. Early July via New York for 2 weeks. c/o Lohmann International Ltd., 26 Broadway, New York, N.Y. Itinerary: New York.

SWEDEN—Yngve Welin, representing self, Stockholmsgatan 44 H, Goteborg O, interested in studying **industrial localization planning, conveyor and transport technology, automation;** requesting technical information on same. Here for 4 weeks. c/o Department of Commerce Field Offices in itinerary. Itinerary: New York, Chicago, Detroit, Los Angeles, Philadelphia.

Bengt Moser, representing AB Bildelslagret, Sankverksgatan 2, Goteborg, interested in buying **automobile scrap presses** and requesting technical information on automobile scrapping business. Here for 10 weeks. c/o Mr. M. Miller, 75-86 Midland Parkway, Jamaica East, New York, N.Y. Itinerary: New York, Allentown, Pa.

URUGUAY—Rodolfo L. Vasen, representing General Machinery Co. S.A., Av. Joaquin Suarez 2856, interested in **road building equipment, agricultural machinery.** July 12-13 via New York for 2 to 3 weeks. c/o Caterpillar Tractor Co., Peoria, Ill. Itinerary: New York, Washington, Chicago, Milwaukee, Peoria, San Francisco.

VENEZUELA—Remo Pregnolato, representing Casa del Radiador, Calle Bolivar 123, Ciudad Ojeda, Distrito Bolivar, Estado Zulia, interested in **machinery** and **materials for manufacturing radiators.** Here for 2 months. c/o Department of Commerce Field Offices in itinerary. Itinerary: New York, Chicago, Miami.

Mexican Government to build water purification plants

The Mexican Government's Secretariat of Hydraulic Resources has announced that bids are being invited for construction of water purification plants in seven villages in the State of Yucután.

The project will be financed by the Inter-American Development Bank. Bids are to be submitted before July 25.

Bidding will be to obtain a contract to provide operational equipment for the plants, materials and electrical equipment for power and lighting, and for all other equipment and materials needed for the construction.

Detailed information and specifications may be obtained from the Secretaria de Recursos Hidraúlicos, Jefatura de Agua Potable y Alcantarillados, Dirección de Construcción, Paseo de la Reforma No. 77-10 piso, México, D.F.

Leads for Importers

Commodities are offered direct unless specified.

203 Canning, Preserving Foods

IRAQ—10,000 tons of catfish, annually, for human consumption; 5,000 tons of dried catfish to be used as poultry feed. Yahya al-Khateeb, 44/25 al Dhubbat St., A'adhamiya, Baghdad. WTD 5/16/64.

223 Broad Woven Fabric Mills, Wool

GERMANY—Textile cloth for ladies' outer garments from pure wool, wool blended with staple, camel hair or wool blended with Trevira (polyester); manufacturer seeks several representatives in the U.S. Boetzelen Textilbetriebe, Postfach 663, 405 Moenchengladbach. Samples are available to interested U.S. firms upon request. Write: Commercial Intelligence Division, BIC, Rm. 6311, Department of Commerce, Washington, D.C. 20230. WTD 4/29/64.

233 Women's, Misses', Juniors' Outerwear

★★ UNITED KINGDOM—Trade Mission
Ladies' hand tailored skirts, kilts, suits, coats of tartan tweeds. A. Lynn, G. P. Benson, Directors, Benson & Lynn, 37 Mitchell St., Glasgow, C.1, Scotland. I.R. 41.

322 Glass, Glassware

★★ UNITED KINGDOM—Trade Mission
Sophisticated mass produced precision glassware (preforms for tubes, transistors); pharmaceutical glassware; electronic glassware. Epsom Glass Industries Ltd., Longmead, Epsom, Surrey, England. I.R. 124.

328 Cut Stone Products

★★ UNITED KINGDOM—Trade Mission
Sawn or polished slabs in all types of British and Scandinavian granite. Rough blocks of same granite also can be supplied. James Wright & Sons (Aberdeen) Ltd., Royal Granite Works, Aberdeen, Scotland. I.R. 39.

342 Cutlery, Hand Tools, General Hardware

SWEDEN—High quality razor blades. Svenska Rakbladsfabriken AB (manufacturer), Grastorp. WTD 6/10/64.

★★ UNITED KINGDOM—Trade Mission
Manufacturer seeking U.S. distributor of marine hardware for brass and gunmetal copper tubing fittings used on vessels. Can supply American threading. Alexander Ferguson, Ltd., Eclipse Works, 7 York St., Ayr, Scotland. I.R. 49.

354 Metalworking Machinery, Equipment

SWEDEN—Machinery for manufacturing razor-blades. Svenska Rakbladsfabriken AB, Grastorp. WTD 6/10/64.

★★ UNITED KINGDOM—Trade Mission
Punch presses, tool and dies. Job-shop will manufacture "to order." Turner Bros. (Birmingham) Ltd., Galvanic Works, Cliveland St., Birmingham 19, England. WTD 8/2/62. I.R. 44.

High speed coil winding machine. Work Study Equipments, 4 Woodman Lane, E. 4/34 Uphall Rd., Ilford, Essex, England. I.R. 206.

Firm interested in manufacturing and marketing in U.S. under license agreement following: Extrusion equipment in plastic, ferrous and non-ferrous, vacuum forming equipment for plastic, cold heading, fast wax casting, pipe making machinery, weld position machinery, vacuum diffusion welding, ultra sonic cleaning equipment, stud welding guns, electro machinery and finishing, electro hydraulic and pressing. A.I. Welders Ltd., Inverness, Scotland. I.R. 33.

355 Special Industry Machinery

★★ UNITED KINGDOM—Trade Mission
Synthetic resin handling machines for potting, casting, impregnating, primarily for use with epoxy resins. W. H. Sarson, Director, Scientific Measurements & Equipment, Ltd., 78 Main St., Queniborough Leics, England. WTD 1/10/62. I.R. 149.

361 Electric Transmission, Distribution Equipment

★★ UNITED KINGDOM—Trade Mission
Transformer laminations of special alloys. Magnetic & Electrical Alloys, Burnbank, Hamilton, Lanarkshire, Scotland. I.R. 44.

362 Electrical Industrial Apparatus

★★ UNITED KINGDOM—Trade Mission
405 line 210/240 v. AC RF output TV camera. Will market with or without lenses which are interchangeable 16 mm. cine fitting; 625 line is available. Provide spares. Will modify to specification. System is transistorized and is applicable to educational, security, mass lecturing, demonstrations, factories. Priced at $275 with quantity discounts. Requires at least 3 distributorships in U.S. A. B. Hornick, Director, Hornton's Electronics, Inc., Lombard House, Great Charles St., Birmingham, 3, England. NCIA. I.R. 20.★

Torque motors for aircraft, machine tool industry. Also wire contact relays, patchboard, card readers. Also interested in reciprocal deal to import similar or allied components to round out line. Distributor. Mr. Mitchell, Sales Director, Woden Transformer Co., Ltd., Oxford St., Bilston, Staffs. WTD 4/22/59. I.R. 16.★

Firm seeking agent now calling on colleges and universities selling complementary engineering instruction equipment. Manufacturer of servo systems used in engineering colleges to illustrate principles of closed loop position control. Feedback Limited, Crowborough, Sussex, England. I.R. 152.

364 Electric Lighting, Wiring Equipment

★★ UNITED KINGDOM—Trade Mission
Sealed terminals for use in sealed oil-filled transformers and chokes for all climatic conditions. Insulating material used is high alumina ceramic. S. Smith & Sons (England) Ltd., Spark Plug & Ceramics Division, Putney Vale, London, S.W. 15, England. WTD 11/15/63. I.R. 167.

365 Radio, Television Receiving Sets

★★ UNITED KINGDOM—Trade Mission
Motor units with 4-speed switches and tone arms with crystal cartridges for U.S. manufacturers of record players. Motors are designed to operate on 110 V/60 cycles. Quantity price is $4.05 c.i.f. New York or $3.80 f.o.b. Units are packaged 8 to a box. Samples available on request. Robuk Electrical Industries Ltd., Grosvenor House Gardens, Croydon, Surrey, England. I.R. 88.

367 Electronic Components, Accessories

★★ UNITED KINGDOM—Trade Mission
Large electrical equipment manufacturer would like to appoint distributor in U.S. for line of semiconductor automatic static exciters for alternators. Units cover broad range for small alternators to alternators up to 500 KVA. Desires distributor now calling on voltage regulating equipment manufacturers who has technical capacity for servicing the line. G.E.C. (Engineering) Ltd., Rectifier & Control Engineering Div., Birmingham 6, England. I.R. 6.

Firm desires marketing and sales agency in U.S. for electronic tube pulse modulators, low power amplifiers, microwave devices, cathode ray tubes, photocells, voltage stabilizers, Geiger-Muller tubes. M.O. Valve Co., Ltd. (subsidiary of G.E.C.), Brook Green, Hammersmith, London, W.6, England. WTD 6/13/62. I.R. 136.

369 Electrical Machinery, Equipment, Supplies

★★ UNITED KINGDOM—Trade Mission
Precision frequency generation equipment. C. A. Henn-Collins, Director, H.C.D. Research, Ltd., 77 Gloucester Rd., Croydon, Surrey, England. WTD 3/18/64. I.R. 184.★

Multi-track recording heads, magnetic tape machines for instrumentation, TV transmission test equipment, fault warning annunciators, stabilized power supplied DC/AC invertors, transformers, transductors. Also data processing equipment to special design. J. P. Coleman, Director, Gresham Lion Group, Ltd., Twickenham Rd., Hanworth, Middlesex, England. I.R. 172.

373 Ship Building, Repairing

CEYLON—Royal Ceylon Navy Tug (Empire Class) in mechanically good condition. Closing date for quotations August 10. Particulars and tender conditions available, upon written application; tender forms obtainable for $105.04 from: Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C. 20008.

381 Laboratory Instruments, Associated Equipment

★★ UNITED KINGDOM—Trade Mission
Specialized line of laboratory instruments. Would be interested in reciprocal arrangement. Manufacturer. H. Prickard, Product Engineer, P.S.B. Instruments, Palmerston Rd., Wealdstone, Harrow, Middlesex, England. I.R. 204.★

382 Instruments for Measuring, Controlling, Indicating Physical Characteristics

★★ UNITED KINGDOM—Trade Mission
Boiler tube inspection camera, slush drag measuring equipment, water depth detection for aircraft runways and integrating deceler-

ometer. Arvid C. Willen, Marketing Manager, Inertia Switch, Ltd., 123 London Rd., Camberley, Surrey, England. I.R. 117.

Ultrasonic level gauge; stroboscope. Electronic Applications (Commercial) Ltd., Endeavour House. North Circular Rd., London, N.W. 2, England. I.R. 87.

U.S. representative wanted to explore medical and industrial application of pressure measuring instrument capable of measurements as low as 3mm of water presenting same full scale on meter. Mercury Electronics, 670 Argyle St., Glasgow, C.3, Scotland. For electronic technical data sheet write: Commercial Intelligence Division, BIC, Rm. 6311, Department of Commerce, Washington, D.C. 20230. I.R. 43.

383 Optical Instruments, Lenses

*FRANCE—Manufacturer wants to appoint agent for sale in the U.S. of its production of photographic lenses and zoom lenses (one of their applications is in the production of missiles). Societe Generale d'Optique, 76 Bld. de la Villette, Paris 19e. WTD 8/21/63.

★★ UNITED KINGDOM—Trade Mission Illuminating magnifiers. I.V.A. Engineering Co., Ltd., Crowthorne Rd., Sandhurst, Camberley, Surrey, England. I.R. 119.

384 Surgical, Medical, Dental Instruments

★★ UNITED KINGDOM—Trade Mission Firm seeks U.S. distributor of teaching aids, anatomy sets, plant science histology, allied medical aids. Photomicrographs and allied microphotography. Southwest Optical Ltd., Conifers Hoopers Pool, Southwick, Near Trowbridge, Wiltshire, England. I.R. 83.

396 Costume Jewelry, Novelties, Buttons, Notions

FRANCE—Down (goose, duck), and ½ down (goose and duck), processed material of good quality. Wholesale exportation in jute bags 120x130 centimeters of 30 to 50 kilograms (66 lb. to 110 lb.) each. Direct sale to U.S. importers preferred. Abel Crabos (Etablissements), 26 Rue Lamarque, Saint-Sever, Landes. WTD 6/4/64.

399 Manufacturing Industries

GERMANY—Candles, all kinds and sizes, with and without ornaments, straight and spherical, made 100% or only partly of beeswax. Gebrueder Gies Wachswarenfabrik (manufacturer), Moellner Landstrasse 128, Hamburg-Bergedorf.

509 Wholesalers

BELGIUM—Paintings, any type including abstracts, either original or reproductions; preferably on contract basis such as: 30 paintings per month, size 60 x 60 cm and/or 100 paintings per month, size 25 x 30 cm. Edmond A. Versluysens, 204 Lamorinierestraat, Antwerpen.

Construction Projects

Supplementary information on items followed by (★) is available to U.S. firms domiciled in the United States from the Trade Opportunities Staff, Business and Defense Services Administration, U.S. Department of Commerce, Washington, D.C. 20230 or telephone: 202—WO 7-4674 in Washington.

BOLIVIA—(11.10 pesos=US$1). A $33.2 million road project for construction of 2 important **roads** connecting tropical lowlands of high agricultural potential with Bolivia's second city, Cochabamba, has been approved by AID. This loan is the biggest single project in Bolivia approved under the Alliance for Progress, and except for the loan made for the Cochabamba-Santa Cruz highway, the largest foreign assistance project ever undertaken in the country.

Two roads, designated routes 1 and 4, will be built under the project. Route 4 will be a two-lane paved highway between Cochabamba and Villa Tunari, on to Puerto Patino, 209 kilometers long, and will cost $26.7 million. Route 1, which will connect Villa Tunari with Puerto Villarroel, will be 95 kilometers long and will cost $6.5 million. Together with the last 43 kilometers of Project 4, Project 1 will open some of the most fertile land in Bolivia for colonization.

The U.S. engineering firm of Tippetts, Abbett, MacCarthy & Stratton (TAMS) of 375 Park Ave., New York, N.Y., did the initial feasibility study for these roads, and is expected to complete detailed engineering plans. When these plans have been completed (roughly 6 to 8 months' time), TAMS, acting as the agent for the Bolivian Ministry of Economy, will pre-qualify suitable bidders among U.S. and Bolivian engineering firms. Qualified firms will then be invited to bid on these projects. TAMS and representatives of the Government of Bolivia will evaluate the bids. According to the present schedule, construction will begin some time in the second quarter of 1965.

CANADA—(Can/$100=US$92.50). A proposed $47 million **natural gas liquid pipe line** and **refrigerated tanker complex** was announced on June 12 by the President of Mountain Pacific Pipe Line Ltd., Calgary. The 580-mile 8″ dia. pipe line will be built from Edson, Alberta through the Yellowhead route to tide-water at Port Moody, British Columbia. Initial throughput of the line will be 17,000 barrels per day of natural gas liquids.

Target date for completion of the pipe line is latter part of 1965. Natural gas processing plants in Western Alberta will be the source of the products to be contracted for by the company. During the construction period 1,800 men will be employed, representing a payroll of approx. $10 million. Cost of the pipe line, gathering system, plants and storage facilities is put at $35 million.

COLOMBIA—(100 pesos = US$11.11). Considerable Colombian attention has been given to the possibility of a **trans-oceanic canal** providing a transportation link between the Atlantic and Pacific Oceans. (INTERNATIONAL COMMERCE, May 4, p. 54).

However, another inter-oceanic connection has been proposed. This would be an inland and a land waterway transportation route consisting of the Amazon and Putumayo River systems, whose western terminus is Puerto Asis in Southern Colombia, connecting with a road system that would terminate at the Southern Colombian Pacific port of Sanquianga. The land portion of this so-called "dry canal" is already partially existent and would be less than 800 kilometers in length.

The port of Sanquianga, one of the deepest on the Pacific littoral, is a developing area and will be the terminus of a new pipeline to be constructed from the newly discovered Putumayo oil fields.

Plans are underway for the construction of 2 large **cement factories:** one in Toluviejo (Department of Bolivar), and one in Moniquira (Department of Boyaca). The Toluviejo project is being promoted by the Corporacion Financiera Colombiana de Desarrollo Industrial and will represent a total investment of approx. 117 million pesos (US$11.7 million). When in full operation, the plant is expected to produce about 1000 tons of cement daily.

The Moniquira project, being sponsored by the Planning Office of the Department of Boyaca reportedly will cost 80 million pesos and will result in a daily cement output of about 600 tons. Both projects are well advanced in the planning. Construction dates have not been announced.

FINLAND—(100 markkas = US$31.25). The firm of K. Strom & O. Tuomisto, Veneetekijantie 14, Helsinki was awarded the contract for preparing a construction plan for a **new airport terminal** for Helsinki. The plan must be completed by December 1. Actual construction is scheduled for the autumn of 1965 provided, however, that the Parliament appropriates the required funds.

Construction will be done in stages. A passenger pavilion, 80,000 cu. meters in size, will be built initially and will then be gradually enlarged to 118,000 cu. meters. Air traffic control, freight handling and office facilities in separate buildings will also be provided at a later date.

U.S. firms seeking more detailed information can communicate with the Tie- ja Vesirakennushallitus, E. Esplanaadikatu 4, Helsinki. Correspondence can be marked for the attention of the Project Manager, Mr. Suvanto.

HONG KONG—(HK 100 dollars = US $17.50). Copy of selected list of **contract awards** made by Colonial Secretary of Tender Board of Hong Kong is available on loan to U.S. firms. Among several construction contracts awarded, the largest (US $2,232,199) went to Sang Hop Construction Co., Ltd., 471/3 Lockhart Rd., for the **construction of Block F1,** Tsz Wan Shan Resettlement Estate.★

IRAQ—(1 dinar=US$2.80). Economic Planning Board has approved plans for construction of a new ID 12 million ($33.6 million) **Television and Radio Center** in Baghdad. This project, reported in INTERNATIONAL COMMERCE, March 30, p. 46, will include a Ministry of Guidance **office building,** radio and television **studio building,** and a concrete **television tower** with a revolving **restaurant** on top. It is possible, however, that the 360-meter concrete television tower may be constructed on a West Baghdad site, some distance from the T.V.-Center complex. The T.V.-complex itself will be located in the Karradat Meriam section of Baghdad opposite the Presidential Palace and the American Embassy. Contact: Ali Gkaideh, Director of Planning & Projects, Ministry of Guidance, Baghdad.

ITALY—(1000 lire=US$1.60). Raffineria Italiana BP, a new association of British Petroleum of Italy, has announced an application has been submitted to the Ministry of Industry requesting approval for the company to construct a **refinery** at Volpiano, Province of Turin. Along with this request to the Italian Government, BP also asked for authorization to construct a **pipeline** from Genoa to Volpiano.

Total cost of the proposed project, including construction of the refinery, pipeline, and other expenses, will be about 50-60 billion lire ($80-96 million). BP hopes that the new refinery will be completed and in operation sometime in 1967.

The proposed refinery will have an estimated annual capacity of 4 million tons plus a reserve of 30% as required by Italian law. It is expected that the new establishment will employ about 3,000 drivers to operate 1,500 tank trucks.

MALAYSIA—(M100 = US $32.68). 90 acres of substandard houses and shops in the heart of Singapore's oldest downtown area will be demolished in the near future and replaced by a modern **multi-story apartment building, shops, offices** and **schools.** A major **land reclamation project** on the waterfront will in four years push the coast line about one-half mile further out to sea, creating about 2,000 acres of new land for residences and parks. Contact Public Works Department, Singapore.

MOZAMBIQUE—The firm of Manuel da Silva Oliveira was awarded the contract to reinforce the Beira **airport runways** for jet and aircraft use. Costs are estimated at $1.5 million.

Work will begin shortly on **additions to** the recently completed Macuti **hospital** at Beira. Estimated cost is $175,000. Improvements will include the addition of 2 **floors,** increasing the total capacity to 300 **beds,** a **central steam boiler,** a **maternity center,** and **air conditioning.** The project is covered by the Second Development Plan.

PAKISTAN—(100 rupees = US $21). The Government will construct 2 **highways** as a result of two credits extended by the International Development Association, an affiliate of the World Bank. One credit of $22.5 million is for construction of 150-mile highway between Dacca and Chittagong in East Pakistan; the other, $17 million for construction of a 90-mile highway between Karachi and Hyderabad and 3 **bridges** to the north of West Pakistan.

The East Pakistan Project calls for a 150-mile, all-weather, 2-lane paved road to connect the two major cities of Province, Dacca (the capital) with Chittagong (the main port for three major river crossings). The project will be carried out by the Roads & Highways Dept. of East Pakistan. Since the Department was only recently set up, general consultants will be appointed as advisors and assistants to help establish an organization capable of operating and maintaining a highway system throughout the Province. The project is scheduled for completion June 1969 at a total estimated cost of $45.5 million. The IDA credit of $22.5 million will cover the estimated foreign exchange component and the remaining funds will be provided by the Government of Pakistan.

The West Pakistan Project is the first section of a projected national highway which will extend from Karachi northward to Lahore, Rawalpindi and Peshawar. The 90-mile highway connecting Karachi and Hyderabad will reduce the distance between the two cities by about 30 miles and cut the traveling time for trucks and buses from 5 to 3 hours. The limited-access toll road will supplant an existing road which will continue in operation as an alternative route. The project also includes the construction of 3 bridges in the north-central part of West Pakistan.

The project will be carried out by the Communications Wing of the Communications and Works Dept. of West Pakistan. Consultants will be retained to advise and assist the Wing in building up an organization capable of operating and maintaining the highway system throughout the Province. Total cost of the project is estimated at $35.5 million. The IDA credit of $17 million will cover the estimated foreign exchange requirements and remaining costs will be provided by the Government of Pakistan.

Contact the above-named agencies of the Government of Pakistan.

PARAGUAY — (100 guaraníes=US$.79). Supply of equipment for construction of the hydroelectric plant on the Acaray and Monday Rivers is a substantial opportunity for U.S. firms. The $24 million plant is to be financed with a $14,150,000 loan from the Inter-American Development Bank and $9,850,000 from a European consortium. Potential U.S. suppliers who wish to bid on the project may obtain detailed information from the Administrator of the National Electric Administration, Ing. Don Enzo Debernardi, Administrator General, Administracion Nacional de Electricidad, Ayolas y Palma, Asuncion, Paraguay. Specifications for bids on the project are forthcoming.

PERU—(100 soles=US$3.73). The Peruvian Government proposes to invest approx. 78 million soles ($2.9 million) over the next 15 years to construct an **industrial park** for the city of Arequipa. It is hoped that this project, which is still in the pre-feasibility stage will ultimately attract $13.7 million in private capital for installation of 20 basic industries. Contact: Junta de Rahabilitacion y Desarrollo, Arequipa.

SAUDI ARABIA—(100 riyals = US $20). The Minister of Petroleum & Mineral Resources has announced that the Saudi Government plans to sign a contract for the construction of a **rolling mill** with the British firm of W. H. A. Robertson & Co., Ltd. The mill, to be operated under the control of the General Petroleum & Minerals Organization, will be located just south of the city of Jidda and will have a capacity of 45,000 tons per year, capable of expansion to 60,000 tons. It reportedly will produce iron rods, heavy wire and angle iron. The Saudi Government has already allocated about $6.8 million for this project.

The British company has agreed to import and install all the necessary equipment to get the mill in operation within 12 to 14 months of the date of the signature of the contract; full scale production is scheduled to start within two years. The company is also to train the Saudi-Arabians in all phases of the plant's operation so that they can take over as soon as possible.

SOUTH AFRICA—(1 rand=US$1.40). A large modern **apartment building** is to be constructed by the South African Mutual Life Assurance Society at an estimated cost of R1M. The apartment will consist of 115 three, four and five roomed apartments, including five large masionettes and penthouses on the top floor. A **swimming pool** will be constructed for use by the tenants. Contact: South African Mutual Life Assurance Society, Port Elizabeth.

A contract for the laying of the **440-mile oil pipeline** from Durban to Johannesburg was awarded to the South African firm Alfred McAlpine & Son (Pty.) Ltd. of Johannesburg, and the Canadian firm of Robert B. Somerville Ltd. of Toronto for R5,409,405 ($7,627,261). Alfred McAlpine & Son is a wholly-owned subsidiary of a U.K. construction company of the same name. Robert B. Somerville Ltd. of Toronto is an associated company with Alfred McAlpine. A subsidiary of a U.S. company, A. O. Smith International S. A., Johannesburg, was awarded the contract for meters, line strainers and de-aerators. This amounted to R275,609. The pump contract, estimated at R600,000, has not yet been awarded.

For laying the pipe, it is estimated that 50 units of tractor equipment will be required, including bulldozers and pipe laying cranes. Since the pipe laying operation will be through difficult terrain, a large quantity of air compressors and heavy duty trucks will be needed some with lifting equipment for pipe transport and possibly some all-wheel drive vehicles. Some of this equipment may be transferred from the U.K. and Canada to South Africa.

U.S. manufacturers interested in the sale of equipment for this contract should contact the head office of Robert B. Somerville Ltd., 27-16th St., Toronto, Canada, and Alfred McAlpine & Son (Pty.) Ltd., 34 Barbican Bldg., President St., Johannesburg.

SYRIA—(1 pound=US$.26). The Syrian Government has announced the location of the first 7 silos under the AID-financed **grain storage silo construction program.** The first project a terminal silo at Aleppo with a capacity of 100,000 metric tons. It has been decided to locate 6 smaller silos, total capacity 5,400 m.t., in the town of Munbaj to the north-east of Aleppo and one silo, capacity 5,000 m.t., in the town of Al-Bab between Munbaj and Aleppo.

Under the AID loan it is expected that 11 storage facilities will be constructed together with a **feed mill** and 3 **feed facilities.** U.S. consulting engineering firm, Weitz-Hettelsatter of Kansas City, is responsible for the feasibility studies of the project. Tenders for construction of the silos have not been published.

THAILAND—(100 baht=US$4.80). The Ministry of National Development has announced the Government's intention to accelerate its earlier plans for **enlarging** the **generating facilities at the Bhumipol (Yanhee) Dam.** The dam and the first two generating units (each of 70,000 kw) of the related hydroelectric installation were inaugurated recently. Currently revised plans call for the installation of 2 additional generating units (each of 70,000 kilowatts) early in 1965. Contact: Yanhee Electrical Authority, for Ministry of National Development, Bangkok.

Reportedly, the Thai Government has decided to establish an organization under the supervision of the Ministry of Interior to be in charge of welfare **housing** activities. Projects will include dwellings for low and middle-income families, slum clearance and urban renewal. The Bureau will have an annual budget of about $10 million for construction costs of low income welfare housing, and additional $10 million for slum clearance costs and assistance to middle income families for

construction of housing units. Contact: Ministry of Interior, Bangkok.

TUNISIA—At a UN Economic Commission for Africa meeting in Algiers of delegates from Tunisia, Algeria, Morocco, Mali, Mauritania, Niger, Chad and the U. A. R., a commission comprised of Tunisia, Algeria, Mali and Nigeria was established to study a proposal for a **trans-Sahara road** which would cost more than $120 million.

The four countries will examine existing studies on the project, seek necessary experts and determine means for finding funds to finance new preliminary studies. The four-country commission will report on its work at the next meeting of the Economic Commission for Africa.

A copy of the preliminary study, "Problems of Transport Across the Sahara", is available for inspection at the ECA desk, Africa Division OIRE, Department of Commerce, Washington, D.C. 20230.

SYRIA—(1 pound = $.26). The Municipality of Aleppo is seeking U.S. commercial interest in the municipal project for the construction of a **sewage disposal plant.** A preliminary consulting engineers' study proposes 3 types of plants. A plant for the initial chemical water purification process, suitable for a population of 500,000, would cost SL13 million (US$3.4 million). A plant designed to accomplish a complete bacterial disposal of sewage would cost about US$6 million. Partial bacteriological breakdown of sewage would be somewhat less expensive. Cost estimates are for a first stage plant only, of which 30 per cent of the cost would be accounted for by electrical and mechanical equipment, 40 per cent by civil engineering works, and 30 per cent would be accounted for by engineering fees, interest and other miscellaneous expenses.

Installation of a sewage disposal plant has become necessary because of a contemplated construction of a slaughter house with a capacity of 1,000 animals per day south of Aleppo. U.S. firms interested in participating in this project, willing to offer credit and provide the sewage disposal plant as a "package deal" together with the engineering advice necessary to make the plant an operating success are invited to contact 'Adil Yagan, Engineer, Municipality of Aleppo, Aleppo, S.A.R.

One copy in French of the preliminary consulting engineers' study for the proposed plant is available on two-day loan from BDSA's Trade Opportunities Staff (III), Department of Commerce, Washington, D.C. 20230.★

It has been reported that Syrian private entrepreneurs have offered to develop at a cost of about SL250,000 a large **recreation area** in Aleppo by damming a small river, Quweyq, which runs through the heart of the city and installing a children's playground, boating facilities and a small amusement park. The area would be developed in conjuction with a playground-recreation area which the Municipality intends to develop. The Municipality has already constructed a large indoor "field-house."

These projects are in addition to a project for a **theatre** seating 4,000 persons for which the Municipality is considering allotting SL2 million, a "town hall" project for which a French professor of architecture at Aleppo University has been asked to draw plans, and a slaughterhouse. A contract has been signed with a Polish firm for construction of the slaughterhouse.

The Ministry of Public Works has announced that this year's development budget contains an appropriation of SL4.4 million for completing construction work now underway on a **museum,** a **city prison,** a **Palace of Justice,** and a 550-bed **hospital.**

U. A. R.—(1 EL=US$2.87). The Ministry of State for Electric Power has announced that construction of the Qattara Depression **electrification project** would be started in 1967 and completed in 1972 at a cost of EL120 million ($276 million). Design studies carried out by German experts in collaboration with the UAR Ministry of Electric Power should be completed by the end of the year. About 15,000 workers would be involved in the execution of this project. Electric power generated by this project is estimated between 600-800 megawatts; eventually raised to 2,000 megawatts. Contact: Ministry for Electric Power, Cairo.

URUGUAY—(100 pesos=US$13.51). A $175 million **expansion program** has been approved by the Uruguay Government to permit "Administration General de los Usinas Electricas y los Telefonos del Estados," to obtain financing for the following projects:

2 gas turbine generators for peak consumption periods and reserves (40,000 kw capacity); installation of the fifth unit at the Batlle y Ordonez Thermal Power Plant (80,000 kw capacity); installation of the first unit of the Super Thermal Power Plant (100,000 kw capacity); and construction of a hydroelectric dam at El Palmar on the lower Rio Negro (270,000 kw capacity). Contact: Agency Montevideo, Uruguay.

The Government of Uruquay reportedly is encouraging Uruguayan interested firms, especially cooperatives, to present plans for new **sugar mills.** Since the National Council of Government has declared the installation of one or more sugar mills to be in the national interest, some Government financial backing is anticipated.

U.S. firms are invited to contact those Uruguayan interested firms who plan to present to the Government projects for construction of sugar mills.

A list of 15 names is available on loan from BDSA's Trade Opportunities Staff (III), Department of Commerce, Washington, D.C. 20230.

The deadline for presentation of these plans is July 31. Each plan is to include an analysis of the site proposed, a cost analysis of production and plans for construction and financing.

Iraq issues 2 contracts for irrigation project, asks bids

Bids are invited by the Directorate General of Irrigation for the Ministry of Agrarian Reform, Baghdad, for the Dalmaj Irrigation Project-Mazzaq Systems which is located in the vicinity of Kut. This project is one part of the detailed economic plan for Iraq.

Two contracts have been issued, both with a bid deadline of August 20.

Contract No. DJ 4 calls for 5,232 cu. yd. of earthwork, 180 miles of main canals and drains, 497 miles of branches off the main canal, 136 large structures and 292 small structures.

Contract No. DJ 10 calls for water-control equipment: 8 lifting gates, 21 radial gates and 292 movable weirs.

Tenders may be obtained for a non-refundable fee of U.S. $70 from the Directorate General of Irrigation, Legal Section.

New Books and Reports

***Exporting to Japan.* Published by the U.S.-Japan Trade Council. Washington, June 1964. 22 pp. Free.**

Among the subjects discussed in the pamphlet are the facilities and services provided by the U.S. Department of Commerce, including overseas business reports, trade lists, world trade directory reports and trade contact surveys, as well as trade fairs, trade centers, and trade missions. The work of the Japan Trade Centers in the U.S. is described, and a special section is devoted to the activities of Japanese trading companies, which carry on the bulk of the trade between the U.S. and Japan.

Write to the U.S.-Japan Trade Council's headquarters, 1000 Connecticut Ave., Washington, D.C. 20036.

***Economic Surveys by the OECD.* OECD Unit, McGraw-Hill Book Co., Inc., 351 W. 41st St., New York, N.Y. 10036. 80¢ each or $10 subscription for the entire series.**

A series of economic studies for member countries published annually by the Organization for Economic Cooperation and Development, discussing economic developments and policies, business trends and outlook, and placing emphasis for each country on its most important current problems. Statistical annex included for each showing traditional business indicators, population, and similar information.

***Operation of the Trade Agreements Program.* 14th Report, July 1960-June 1962. (TC Pub. 120.) 1964. U.S. Tariff Commission, Washington, D.C. 20436. 156 pp. Free.**

Covers situation July 1960 through June 1962, when U.S. had trade agreement obligations in force with 47 countries. For specific countries deals with such matters as tariff revisions, import restrictions, subsidies, and quotas. Also detail on regional conference arrangement, as European Economic Community and Latin America Free Trade Area.

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Calendar

July

13-31—Economic Education Workshop, University of Arkansas Medical Center, **Little Rock, Ark.** Sponsor: University of Arkansas, State of Arkansas Department of Education. Theme: Meeting the Challenges of Trade and Aid. Speaker (July 29) Eugene M. Braderman, Director, Bureau of International Commerce.

14—Monthly luncheon meeting, International Executives Association, Hotel Statler Hilton, **New York, N.Y.** Open forum session under the direction of Stefan Rundt of S. J. Rundt & Associates.

14—Practicing Law Institute, Hotel Statler Hilton, **New York, N.Y.** Theme: U.S. Aid in Foreign Markets—Trade Mark and Patent Regulations. Speaker: Vincent Travaglini, Bureau of International Commerce.

15—American Management Inc., LaSalle Hotel, **Chicago, Ill.**

27—Available for discussions with businessmen, J. A. Van Swearingen, Commercial Attache, Djakarta, Indonesia, Chicago Field Office, **Chicago, Ill.**

Notice

To publicize local events concerning foreign trade in the "Calendar for International Traders," information should be submitted to this magazine at least 2 weeks before the date of the issue in which it appears. Please include time, place, sponsoring organization and special topic, if applicable. Meetings must be open to the public in order to be publicized in this space.

Write:

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Washington, D.C. 20230

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